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THE PROBLEM OF DIVINE FOREKNOWLEDGE
AND FUTURE CONTINGENTS
FROM ARISTOTLE TO SUAREZ

BY

WILLIAM LANE CRAIG



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For
CHARITY JOY
“our little love and joy”

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PREFACE

The ancient problem of fatalism has resurfaced with surprising vigor in the second half of the twentieth century, especially in its theological form. Already in the first decade of this century, the dean of Polish logicians Jan Łukasiewicz had been moved by the threat of fatalism to draft a multi-valent logic, which he interpreted in terms of three truth values, assigning the third value to future contingent propositions. The theological application of Łukasiewicz's views was made in 1953 and again in 1962 by the Oxford tense logician A. N. Prior, who argued that an omniscient being need not know future contingents. Similar views had been expressed by Charles Hartshorne. G. E. M. Anscombe's reinterpretation of Aristotle's *De interpretatione* 9 renewed interest in the problem of fatalism and sparked an interpretive controversy over the famous sea battle chapter. In a number of essays in the late fifties and early sixties, Richard Taylor found himself moving ever closer to embracing fatalism, which he definitively did in 1962. Three years later Nelson Pike borrowed Taylor's insights in defending an argument for theological fatalism, thus generating a debate within the pages of the *Philosophical Review* which continues down to this day. Suddenly literature on this subject appeared everywhere in the journals: Taylor and his defender Steven Cahn battled their many critics; philosophers of religion of various theological stripes both sprang to Pike's defense and issued refutations of it.

About the same time in several other areas of philosophical inquiry, fatalistic motifs were also cropping up, for the most part independently of the debates surrounding Taylor and Pike. In 1954 and again ten years later, Michael Dummett argued that the logical objection to backward causation is parallel to the argument for fatalism, only the tenses being different, so that rejection of fatalism entails the logical possibility of backward causation, and an extensive debate over the logical possibility and problems of retrocausation ensued. Proponents of time travel similarly charged that their detractors were committing the same logical fallacies as the proponents of fatalism. Meanwhile, as the experimental evidence for the parapsychological phenomenon of precognition grew, philosophers disputed whether precognition and future contingency are compatible, thus closely paralleling the debate going on among the philosophers of religion. In 1969 Robert Nozick passed on to the philosophical public a puzzle known as Newcomb's Paradox, and in the devisive discussion which followed, many saw this puzzle as a paradigm illustration of the problem of theological fatalism.

The contemporary debate has been accompanied by a revival of interest in the historical treatments of the problem of fatalism and, in particular, theological fatalism. The interpretive controversy over the so-called standard and non-standard interpretation of Aristotle has already been mentioned. Prior and Pike in their articles appealed to discussions of the problem by Augustine, Boethius, Aquinas, and Ockham. William Rowe opened a dispute on the proper understanding of Augustine with regard to divine foreknowledge and human freedom. Anthony Kenny re-examined Aquinas's contribution to the subject. Especially great was the interest stirred in Ockham's views by the translation of several of his works, particularly his *Tractatus* on divine foreknowledge and human freedom, translated by Adams and Kretzmann. Most recently Alvin Plantinga's rediscovery of Luis Molina's doctrine of middle knowledge has fanned the fires of that old controversy, and Freddoso's forthcoming translation of Molina's *Concordia* will undoubtedly be met with great interest. So rich are these earlier discussions that Kenny opines, "Nineteenth and twentieth century treatments of these matters have added very little to the work of earlier philosophers and theologians."*

Unfortunately, despite the renewed interest, these earlier works remain largely misunderstood. The names of many historical figures are bandied about as labels for positions which are not recognizably theirs. In the case of other figures, these writers are simply ignored. Aristotle's views on the subject can only be determined by a careful exegesis of the Greek text. Augustine's views are portrayed in contemporary literature in basically opposed ways. The Boethian concept of eternity, so crucial to his solution to theological fatalism, has been recently misconstrued by its defenders. Philosophers have been quick to criticize Aquinas's views without complete understanding. Duns Scotus's very provocative contribution to the debate, including his rejection of Thomas's position, has never been translated and so is little known or understood. Undoubtedly, however, it is Ockham's views which have been the subject of the most distortion in contemporary debates, and what passes for "Ockhamism" in many quarters today is a gross caricature of what he held. Molina's views have been known largely only from secondary literature, since a translation of his *Concordia* has not been published; his creative and fertile work on this subject merits careful study. Finally, Suarez's works on divine foreknowledge and middle knowledge have never been translated and are therefore generally unknown; yet his writings on this subject rank second in importance only to Molina's.

*Anthony Kenny, *The God of the Philosophers* (Oxford: Clarendon Press, 1974), p. 13.

Hitherto, there has not yet been a study of monograph length devoted to the historical debate over theological fatalism. There is the article "Future Contingents" by Calvin Normore in *Cambridge History of Later Medieval Philosophy*, which, given its length, can only sketch the general lines of each figure's position. Two unpublished dissertations on this subject do exist: J.R. Cassidy's "Logic and Determinism: A History of the Problem of Future Contingent Propositions from Aristotle to Ockham" (1965) and Paul Streveler's "The Problem of Future Contingents from Aristotle through the Fifteenth Century" (1970), but these also tend to sacrifice depth in favor of breath in their surveys of the problem's history. The closest thing to a published monograph on this subject is the recent, fine collection of papers originally presented at a conference at Ohio State University in 1982 and edited by Tamar Rudavsky under the title *Divine Omniscience and Omnipotence in Medieval Philosophy*.** This collection is especially helpful in bringing to light Islamic and Jewish perspectives on theological fatalism, as only one essay in the volume treats Christian perspectives on this problem, which will be the focus of our attention in the present book.

The present work attempts to present in-depth case studies of the views of eight of the most important thinkers who have dealt with the problem of theological fatalism. It is not intended to be a history of the debate nor to catalogue all the various options proffered as solutions to the problem. Indeed, my primary interest is in seeing how Christian thinkers committed both to divine knowledge of the future and to freedom reconcile those commitments. It is for this reason that the otherwise interesting contribution of a thinker like Gersonides, who denied the validity of the Principle of Bivalence for future contingent propositions and consequently God's knowledge of future contingents, is left aside. Our interest lies with those philosophers or theologians who wanted to adhere both to future contingency and God's knowledge of such events.

The research for this book was conducted principally during two sabbaticals, first as a visiting scholar at the University of Arizona in Tucson in 1982-83 and subsequently at the *Bibliothèque Nationale* in Paris in 1985. Expressions of acknowledgement to the various individuals who assisted me in the research and writing of this work may be found in the appropriate individual chapters. But I should like to acknowledge here the hard work of my secretary Jo Lewis, who was responsible for the production of the typescript.

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**Tamar Rudavsky, *Divine Omniscience and Omnipotence in Medieval Philosophy: Islamic, Jewish, and Christian Perspectives*, Synthese Historical Library (Dordrecht, Holland: D. Reidel, 1985).

CHAPTER ONE

ARISTOTLE

The contemporary debate over the compatibility of divine foreknowledge and human freedom extends a discussion which reaches back to the first centuries of the Christian church and ultimately traces its roots to the fatalistic controversies of ancient Greece. Secular arguments for fatalism, such as the “Master Argument” of Diodorus Cronus or the fatalistic difficulties presented in Aristotle’s *Peri hermeneias* 9, were to provide the stimulus for the debate concerning fatalism in a religious context: given the biblical statements concerning God’s foreknowledge of future events, must not the events foreknown by God necessarily occur? Since God presumably knows the truth value of any future contingent singular proposition, the escape suggested by one reading of Aristotle, that such propositions are not yet either true or false, was for the vast majority of Christian thinkers ultimately unsatisfactory, and, indeed, this opinion was finally condemned by Sixtus IV as heretical in 1474 as the result of Peter de Rivo’s teaching a three-valued logic for such propositions at the University of Louvain.¹ Since the “Master Argument” of Diodorus can be re-constructed in only a fragmentary and uncertain way and since Aristotle’s arguments became the subject of regular commentary and debate throughout the Patristic and Medieval periods of Christian thought, I have chosen to begin our historical survey with chapter 9 of Aristotle’s work known in the Latin West as *De interpretatione*.²

THE INTERPRETIVE CONTROVERSY

Aristotle’s discussion of fatalism in *De interpretatione* 9 is itself a matter of considerable interpretive controversy. Recalling D. C. William’s complaint that “Tracing coherent philosophical arguments in *De interpretatione* is rather like finding shapes in a cloud,” one interpreter confesses, “...we can find some evidence for almost anything we hope to see, but the shape we think we find changes as we are looking at it.”³ As a result, at least one recent commentator is willing to speak of an “exegetical stalemate” over *De interpretatione* 9.⁴ I am not so certain that the hope of being reasonably sure of Aristotle’s meaning is in the end so bleak, and in this chapter I hope to come to some adjudication of the interpretive controversy.

The interpretation of this chapter tends to fall into two camps, the first associated with scholars such as W. D. Ross, Martha Kneale, J. L. Ackrill, and Dorothea Frede, representing the standard modern interpretation of Aristotle's position on future contingent singular propositions; the second, claiming to hark back to the medieval understanding of this issue, has been ably defended by G. E. M. Anscombe, Colin Strang, Nicholas Rescher, and Jaakko Hintikka. According to the first interpretation, Aristotle meant to undercut the fatalist argument by denying that future contingent singular propositions possess antecedent truth values. Thus, it is not now true or false that p , where p is such a proposition. Interpreters of Aristotle within this camp may differ among themselves concerning questions such as whether the basis for this denial is Aristotle's view of truth as correspondence, whether he sought nevertheless to maintain the validity of the Law of Excluded Middle for such propositions, whether in his view such propositions become true, whether he held to truth value gaps or to a third truth value for such propositions, and so forth. By contrast, the second interpretation insists that what Aristotle denies is not the truth of future contingent singular propositions, but their necessity, "necessity" here being interpreted, not as logical necessity, but as a peculiarly Aristotelian brand of temporal necessity, which is said to characterize primarily past and present realities. Thus, any future contingent singular proposition p is now either true or false, but since it is not necessary, fatalism fails. Interpreters within this camp may differ among themselves concerning the central thrust of Aristotle's fatalistic arguments, the precise definition of "temporal necessity," the temporal status of truth values for such propositions, as well as specific points of exegesis in support of their general position.

In addition to these two major camps, Vaughn McKim defends a third interpretation according to which the key issue for Aristotle with regard to future contingent singular propositions is neither their necessity nor their truth, but their "decideability." Aristotle, it is said, held that neither antecedent truth nor temporal necessity entails fatalism, and when he denies for any future contingent singular proposition and its contradictory that one is determinately true and the other false, he meant that we cannot decide at present which one is true and which false. The uncertainty is thus epistemic and has nothing to do with a lack of truth value or with temporal necessity.

More recently Sarah Waterlow has staked out a fourth camp, maintaining that on the basis of his discussion in chapters 7 and 8 what Aristotle objects to in chapter 9 is the idea of a necessary *opposition* of truth values for paired future contingent singular propositions. Although in all

antithetical pairs of past- and present-tense singular propositions there is a necessary opposition of one true/one false, in the case of future-tense propositions this is not the case. Since he uses “false” in a naive, logically unsophisticated way, Aristotle argues that in an antithetical pair of future contingent singular propositions one is true and the other is not-true, but the latter is not therefore false, but simply lacking in truth value. Thus the Law of Excluded Middle holds for such propositions, and contingency is preserved, since the disjunct that is true is not necessarily so.

Now rather than try to sort out these opposing interpretations by adducing and weighing proof-texts for each, it would undoubtedly contribute more to our understanding of Aristotle’s arguments and provide a firmer foundation for our subsequent discussion if we dealt with the chapter exegetically, simply proceeding through it and attempting to understand it as we go. Frede has remarked that almost all of the new interpretations of this chapter have the disadvantage of not dealing thoroughly with the text, but restricting themselves to a few passages in order to justify their new interpretation⁵; but certainly the worst offenders on this score have been contemporary analytic philosophers of the traditional camp, who often do not even care whether “Aristotle’s fantasy” (Quine’s epithet⁶) was even adhered to by the poor fellow himself.

Any discussion of this chapter requires, if we are to gain maximum profit from it, that the text be before us. Therefore, let us consider it as translated by Ackrill:

18a28. With regard to what is and what has been it is necessary for the affirmation or the negation to be true or false. And with universals taken universally it is always necessary for one to be true and the other false, and with particulars too, as we have said; but with universals not spoken of universally it is not necessary. But with particulars that are going to be it is different.

18a34. For if every affirmation or negation is true or false it is necessary for everything either to be the case or not to be the case. For if one person says that something will be and another denies this same thing, it is clearly necessary for one of them to be saying what is true—if every affirmation is true or false; for both will not be the case together under such circumstances. For if it is true to say that it is white or is not white, it is necessary for it to be white or not white; and if it is white or is not white then it was true to say or deny this. If it is not the case it is false, if it is false it is not the case. So it is necessary for the affirmation or the negation to be true. It follows that nothing either is or is happening, or will be or will not be, by chance or as chance has it, but everything of necessity and not as chance has it (since either he who says or he who denies is saying what is true). For otherwise it might equally well happen or not happen, since what is as chance has it is no more thus than not thus, nor will it be.

18b9. Again, if it is white now it was true to say earlier that it would be white; so that it was always true to say of anything that has happened that it would be so. But if it was always true to say that it was so, or would be so, it could not not be so, or not be going to be so. But if something cannot not happen it is impossible for it not to happen; and if it is impossible for something not to happen it is necessary for it to happen. Everything that will be, therefore, happens necessarily. So nothing will come about as chance has it or by chance; for if by chance, not of necessity.

18b17. Nor, however, can we say that neither is true—that it neither will be nor will not be so. For, firstly, though the affirmation is false the negation is not true, and though the negation is false the affirmation, on this view, is not true. Moreover, if it is true to say that something is white and large¹, both have to hold of it, and if true that they will hold tomorrow, they will have to hold tomorrow²; and if it neither will be nor will not be the case tomorrow, then there is no ‘as chance has it.’ Take a sea-battle: it would *have* neither to happen nor not to happen.

18b26. These and others like them are the absurdities that follow if it is necessary, for every affirmation and negation either about universals spoken of universally or about particulars, that one of the opposites be true and the other false, and that nothing of what happens is as chance has it, but everything is and happens of necessity. So there would be no need to deliberate or to take trouble (thinking that if we do this, this will happen, but if we do not, it will not). For there is nothing to prevent someone’s having said ten thousand years beforehand that this would be the case, and another’s having denied it; so that whichever of the two was true to say then, will be the case of necessity. Nor, of course, does it make any difference whether any people made the contradictory statements or not. For clearly this is how the actual things are even if someone did not affirm it and another deny it. For it is not because of the affirming or denying that it will be or will not be the case, nor is it a question of ten thousand years beforehand rather than any other time. Hence, if in the whole of time the state of things was such that one or the other was true, it was necessary for this to happen, and for the state of things always to be such that everything that happens of necessity. For what anyone has truly said would be the case cannot not happen; and of what happens it was always true to say that it would be the case.

19a7. But what if this is impossible? For we see that what will be has an origin both in deliberation and in action, and that, in general, in things that are not always actual there is the possibility of being and not being; here both possibilities are open, both being and not being, and, consequently, both coming to be and not coming to be. Many things are obviously like this. For example, it is possible for this cloak to be cut up, and yet it will not be cut up but will wear out first. But equally, its not being cut up is also possible, for it would not be the case that it wore out first unless its not being cut up were possible. So it is the same with all other events that are spoken of in terms of this kind of possibility. Clearly, therefore, not everything is or happens of necessity: some things happen as chance has it, and of the affirmation and the negation neither is true rather than the other; with other things it is one rather than the other and as a rule, but still it is possible for the other to happen instead.

19a23. What is, necessarily is, when it is; and what is not, necessarily is not, when it is not. But not everything that is, necessarily is; and not everything that is not, necessarily is not. For to say that everything that is, is of necessity, when it is, is not the same as saying unconditionally that it is of necessity. Similarly with what is not. And the same account holds for contradictories: everything necessarily is or is not, and will be or will not be; but one cannot divide and say that one or the other is necessary. I mean, for example: it is necessary for there to be or not to be a sea-battle tomorrow; but it is not necessary for a sea-battle to take place tomorrow, nor for one not to take place—though it is necessary for one to take place or not to take place. So, since statements are true according to how the actual things are, it is clear that wherever these are such as to allow of contraries as chance has it, the same necessarily holds for the contradictories also. This happens with things that are not always so or are not always not so. With these it is necessary for one or the other of the contradictories to be true or false—not, however, this one or that one, but as chance has it; or for one to be true *rather* than the other, yet not *already* true or false.

19a39. Clearly, then, it is not necessary that of every affirmation and opposite negation one should be true and the other false. For what holds for things that are does not hold for things that are not but may possibly be or not be; with these it is as we have said.

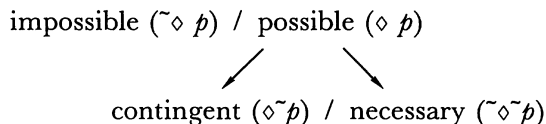
¹ Read λευκὸν καὶ μέγα.

² Read εἰ δὲ ὑπάρξει..., ὑπάρξειν...⁷

PRELIMINARY NOTE ON ARISTOTLE'S MODAL TERMS

Now prior to analyzing the argument of this chapter, it would be well for us to say an introductory word about Aristotle's modal terms, which play a crucial role in the reasoning.⁸ He uses four modal terms: ἀναγκαῖον or necessary, ἀδύνατον or impossible, δυνατόν or possible, and ἔνδεχόμενον or contingent. It should be noted that in *De interpretatione* Aristotle employs "possible" and "contingent" as synonyms. Later in the *Prior Analytics* he will distinguish between these two terms. Hence, in 13.22a15 of the former work he holds that possibility implies non-necessity; he catches this mistake, however, at 13.22b10-28, but still does not distinguish the possible and the contingent. This is not done until *Prior Analytics* 1.3.25a37-40; 1.13.32a18-25, where the possible is equated with one-sided possibility, that is to say, the possible is the contradictory of the impossible: $\diamond p = \sim \Box \sim p$, and the contingent is equivalent to two-sided possibility, that is to say, the contingent is that which is neither impossible nor necessary. In this sense, the possible may also be necessary, since if it is necessary that p , it is possible that p . On the other hand, the contingent must be possible, but it cannot be necessary. According to Aristotle, the possible is that which may be assumed to be true without any impossibility following therefrom. In this sense, the necessary lies

within the realm of the possible. But when in *Metaphysics* 12.1019b28-30 he asserts that the possible is that whose contrary is not necessarily false, he is really speaking of the contingent. Thus we have:



Further discussion of the nature of the modal properties signified by these terms may be reserved for the sequel, as we discuss the text.

STRUCTURE OF CHAPTER NINE

Before proceeding to a specific exegesis of this chapter, it might be well to say a word also about its over-all organisation. Although one's outline of the chapter will depend to a degree on one's interpretation of it, it seems to me that the text falls most naturally into these sections:

- I. Introduction (18a28-34)
- II. Development of Fatalistic Difficulties (18a34-19a22)
 - A. Threat of Fatalism (18a34-b25)
 - 1. Of a contradictory pair of future contingent singular propositions, both cannot be true (18a34-b4)
 - 2. Therefore, the truth of one disjunct entails fatalism (18b5-9)
 - 3. And the past truth of one disjunct entails fatalism (18b9-16)
 - 4. Of a contradictory pair of future contingent singular propositions, both cannot be untrue (18b17-25)
 - B. Absurdity of Fatalism (18b26-19a22)
 - 1. Fatalism implies everything happens of necessity (18b26-19a6)
 - 2. But this is obviously not the case (19a7-22)
- III. Resolution of Fatalistic Difficulties (19a23-b4)
 - A. Necessity and Conditional Necessity (19a23-7)
 - B. Predicating Necessity Collectively and Distributively (19a27-32)
 - C. Application to Future Contingent Singular Propositions (19a32-b4)

Although they might supply different headings, most commentators would agree that the chapter breaks into these three major sections. Both Strang and Ackrill do place II.B.2 under section III,⁹ but it seems that this subsection is more closely tied to the previous subsection than to section III. Aristotle's concern in II.B.1 is to show that if fatalism is true, then "...there would be no need to deliberate or take trouble..." (οὐτε

βουλεύεσθαι δέοι ἂν οὔτε πραγματεύεσθαι), and “...everything is or happens of necessity” (πάντα εἶναι καὶ γίγνεσθαι ἐξ ἀνάγκης).¹⁰ Then in II.B.2 he is constrained to show how foolish this is, “For we see that what will be has an origin both in deliberation and in action...” (ὁρῶμεν γὰρ ἔστιν ἀρχὴ τῶν ἐσομένων καὶ ἀπὸ τοῦ βουλεύεσθαι καὶ ἀπὸ τοῦ πράξαι, and “...not everything is or happens of necessity...” (οὐχ ἅπαντα ἐξ ἀνάγκης οὔτ’ ἔστιν οὔτε γίγνεται).¹¹ Thus, it seems that the major break between sections II and III comes at 19a23.

Proponents of the non-standard interpretation are wont to emphasize that section III is the most important passage for the interpretation of Aristotle’s meaning because only here is he truly voicing his own opinions. Thus, Hintikka, drawing on an insight by G. E. L. Owen, notes that the typical strategy of an Aristotelian argument is to proceed dialectically, presenting arguments first for one side and then for the other, thus giving rise to an *aporia*, which Aristotle then solves.¹² Accordingly, the focus of Hintikka’s attention is directed to section III. Rescher similarly emphasizes that the weight of the interpretation must lie on 19a18-b4, since it is here that Aristotle is expressing his own opinion.¹³ This analysis, however, tends to be very misleading. For although it is true that Aristotle is presenting first the fatalistic difficulties, then the obvious absurdity of fatalism, and finally his own resolution of the difficulties, there seems to be no indication whatever that he is anywhere in the chapter speaking *in persona diaboli* and expressing opinions not his own. Rather, the development of the fatalistic difficulties is hypothetical, predicated upon an assumption introduced in section I and explicated more fully in II.A.1, 4.¹⁴ As Ackrill explains, in section I Aristotle asserts that a certain thesis does not hold of future contingent singular propositions; in section II he develops the argument that if the thesis did hold of future contingent singular propositions, then everything would happen of necessity; and in section III Aristotle denies everything happens of necessity and states his own view concerning such propositions.¹⁵ His solution will be to deny that the thesis holds, but he seems to assent fully to the view that if the thesis in question is granted, then the fatalistic consequences do follow. Thus, the way in which the problem at hand is *introduced* seems to make it clear that Aristotle is not presenting arguments and counter-arguments to which he does not commit himself, only to present his own view in the end (as if he were using the scholastic model *ad primum—sed contra—responsio*). It is noteworthy that in his structural analysis of the chapter Hintikka entirely ignores section I; for him the chapter begins at 18a34.¹⁶ This overlooking of Aristotle’s introduction of the problem no doubt contributes to the misunderstanding that Aristotle is not speaking in his own person until section III. On the

contrary, he speaks for himself in section I in introducing the problem, in section II in developing the logical consequences of a certain assumption, and in section III in rejection that assumption. Hence, the weight of interpretation cannot properly be made to fall on section III in isolation from the rest of the chapter. For Aristotle's opinion, we must consider and weigh the chapter as a whole.

I. Introduction

Turning then to the introduction, we need to ask ourselves exactly what it is that Aristotle is saying about future contingent singular propositions.¹⁷ He distinguishes here several different kinds of proposition, some of which he had discussed previously in chapter 7. His major classificatory division is temporal, and within those divisions propositions are classed according to quantity:

I. Propositions concerning what is or what has been.

A. Universals taken universally

B. Particulars

C. Universals not taken universally

II. Propositions concerning what will be

By (A) Aristotle means statements which are universally quantified, for example, "All men are white" or "No men are white"; by (B) statements about specific individuals, for example, "Socrates is white" or "Socrates is not white"; and by (C) statements which are indefinite, for example, "Man is white" or "Man is not white." Now Aristotle asserts in the introductory section to chapter 9 that what holds of propositions about past or present existents does not hold of propositions concerning future particular or singular existents.

What exactly is it, then, that holds of present and past statements? Aristotle states, "...it is necessary for the affirmation or the negation to be true or false" (*ἀνάγκη τὴν κατάφασιν ἢ τὴν ἀπόφασιν ἀληθῆ ἢ ψευδῆ εἶναι*).¹⁸ This will not be the case for future singular propositions. It looks as though Aristotle is here denying what would later be called the Law of Excluded Middle; but several commentators argue that a more careful reading of the passage suggests that what Aristotle is denying with regard to future singular propositions is what has been called the Principle of Bivalence.¹⁹ The former law states that for any proposition and its contradictory, exactly one is true. The latter principle states that for any proposition, that proposition is either true or false; or in other words, that there are only two truth values, and any genuine proposition must have one of these values. These two logical rules are obviously very closely related, but they are logically distinct. Bivalence is a monadic principle

in that it governs a single proposition; Excluded Middle is dyadic in that it governs a proposition and its contradictory taken together as a pair. Thus, if Aristotle held to Bivalence while denying Excluded Middle, he could, for example, say for any future singular proposition and its contradictory that both were true (or he could say both were false). For in this case the bivalence of truth value is maintained, while the Law of Excluded Middle is violated. So the question is, what exactly is Aristotle denying with regard to future singular propositions?

Ackrill has argued persuasively that Aristotle is denying that the Principle of Bivalence holds for future singular propositions.²⁰ When Aristotle affirms that for past and present propositions that it is necessary for the affirmation or negation to be true or false, he is not merely repeating himself when he discusses whether for all such propositions “...it is always necessary for one to be true and the other false...” (ἀνάγκη...ἅει τὴν μὲν ἀληθεῖ τὴν δὲ ψευδεῖ)²¹ The latter question concerns whether for any of these propositions and its contradictory, one must be true and the other false. This is evident from Aristotle’s discussion in chapter 7:

Of contradictory statements about a universal taken universally it is necessary for one or the other to be true or false; similarly if they are about particulars, e.g. ‘Socrates is white’ and ‘Socrates is not white’. But if they are about a universal not taken universally it is not always the case that one is true and the other false.²²

As Aristotle reiterates in chapter 9, if one constructs an *antiphrasis* (a contradictory pair of propositions, in which the same thing is respectively asserted and denied of the same thing²³) composed of a universal proposition taken universally and its contradictory, one of these propositions must be true and the other false. The same holds of singular propositions. But with indefinite propositions, both could be true, though one is the negation of the other, because what is the case for some of the subjects is not the case for some others. For example, the propositions “Man is white” and “Man is not white” are both, in fact, true, since some men are white while others are not. Hence, for any indefinite proposition p , $p \vee \sim p$ does not hold. Now since Aristotle asserts that for present and past propositions it is necessary for the affirmation or negation to be true or false, while admitting in the same breath that it is not necessary with regard to indefinite propositions that one be true and the other false, he must mean something different by these two expressions. The initial phrase asserts, in effect, the Principle of Bivalence, that for any past or present proposition that proposition is true or it is false. This holds for all past/present propositions irrespectively. But the second expression states that the Law of Excluded Middle holds only for universals taken universally and for singulars, but not for indefinites. Since the contrast

is between past/present propositions on the one hand and future propositions on the other, the difference between them is that the Principle of Bivalence, while holding for the former, does not hold for the latter, that is to say, for any future singular proposition p , p may be neither true nor false.²⁴

It might be thought that Ackrill's reading attributes excessive subtlety to Aristotle, especially in light of the fact that he often uses the two expressions interchangeably (7.17b27, 18a10, 9.18a34, 18b4, 18b27-29, 19b1-2).²⁵ But Ackrill seems justified in his response that the context in chapter 7 makes clear the meaning,²⁶ and the interchanging of these expressions in chapter 9 may be plausibly explained as due to Aristotle's explicit argumentation that with regard to future singular propositions, the Principle of Bivalence entails the Law of Excluded Middle.²⁷ Thus, in 18b27-29 Aristotle repeats the thesis, the assumption of which leads to fatalism, but this time it is stated in terms of the Law of Excluded Middle, rather than the Principle of Bivalence, most probably because he has argued in steps II.A.1, 4 of our outline that Bivalence entails Excluded Middle for future singular propositions. There he seems to argue explicitly that if every affirmation is true or false, then it cannot be the case for any *antiphrasis* of future singular propositions that both statements be true (II.A.1) or that both statements be false (II.A.4). Given the Law of Contradiction, which governs Aristotle's notion of truth and falsity²⁸, the Principle of Bivalence thus entails the Law of Excluded Middle, as Kneale explains:

In chapter 9 of *De interpretatione* Aristotle questions the assumption that every declarative sentence is true or false ... The principle that every statement¹ is true or false is called the Principle of Bivalence and has been distinguished from the Law of Excluded Middle² which is generally formulated 'Either P or not-P,' where 'P' marks a gap into which a declarative sentence may be inserted. Given the definitions of truth and falsity...the principles are, however, obviously equivalent; for if 'It is true that P' is equivalent to 'P' and 'It is false that P' is equivalent to 'not-P', 'P or not-P' is plainly equivalent to 'It is true that P or it is false that P.'

¹....

² By J. Łukasiewicz.....²⁹

Now this seems to be precisely the point Aristotle is making with regard to future contingent singular propositions in section II.A.1, 4. That Ackrill's reading makes such good sense of these two steps of the argument is persuasive evidence that Aristotle in the introductory section is, indeed, distinguishing Bivalence from Excluded Middle and denying that the Principle of Bivalence holds for future singular propositions.

Proponents of the non-standard interpretation, on the other hand, on the strength of what they perceive to be Aristotle's opinion in section III,

interpret the introductory section in its light to read that while for Aristotle past and present propositions are necessarily true, future singular propositions are not necessarily true. That is to say, past/present propositions are characterized by a sort of temporal necessity, which fails to attach to future singular propositions. The Principle of Bivalence as well as the Law of Excluded Middle is valid for all propositions, past, present, or future. Only the modal status of these future propositions differs.

Now this is certainly not what Aristotle *says* in the introduction, and therefore interpreters of the second camp are constrained to explain the text's lack of perspicuity. The usual explanation is that there is in the introduction a deliberate and studied ambiguity on Aristotle's part, presumably to lend credibility to the fatalist's case, which is not resolved until section III.³⁰ Thus, Anscombe, commenting on the opening sentence of chapter 9, states, "—What Aristotle says in this sentence is ambiguous; that this is deliberate can be seen by the contrast with the next sentence."³¹ Throughout the chapter the ambiguity is "carefully preserved and concealed" until 19a28:

But this is not the case, separately speaking, that either of the sides is necessary: the ambiguity of the opening 'it is necessary that an affirmation (or negation) should be true or false' is here resolved. And we learn that when Aristotle said that, he meant that if p is a statement about the present or past, then either p is necessary or not- p is necessary.³²

Hence, when in the introductory section Aristotle states, "With regard to what is and what has been it is necessary for the affirmation or negation to be true or false," what he means is that past/present propositions are characterized by a necessity which is lacking in future singular propositions. He is not denying either the Principle of Bivalence or the Law of Excluded Middle with regard to future singular propositions; rather he is denying their necessity. Strang does grant that in 18a34; 19a39 Aristotle seems to deny that Excluded Middle holds for future contingent singular propositions; but this contradicts 19a28, 30, 36. So Aristotle must have regarded the Law as ambiguous, applicable in one sense to future contingents, but not in another. According to Strang, Aristotle thought that "It is necessary that p (is true) or not- p (is true)" might mean either

- (1) p (*is true*) or not- p (*is true*) is necessary, or
- (2) either it is necessary that p (is true) or it is necessary that not- p (is true).

If (1) is taken in the sense of logical necessity and (2) in some sense of non-logical necessity, then Aristotle would say that while both (1) and (2) hold for past/present propositions, only (1) holds of future contingent singular propositions.³³

Interpreters of the non-standard interpretation therefore maintain that in the introductory section Aristotle is deliberately playing on the ambiguity between $\Box(p \vee \sim p)$ and $\Box p \vee \Box \sim p$. What Aristotle denies with regard to future singular propositions, but affirms for past/present propositions, is $\Box p \vee \Box \sim p$, where the modal operator stands for some sort of non-logical necessity. Thus, Rescher declares roundly that most interpreters agree that 18a 28-34 opens with the insistence that only limited acceptance can be accorded the theses that “propositions must, if true (or false), be true (or false) necessarily” and that “every proposition is either on the one hand necessarily true or upon the other necessarily false.”³⁴

But what is this non-logical necessity that is said to characterize all past/present propositions? Anscombe finds herself at something of a loss to define it: “Thus Aristotle’s point. . . is that ‘Either p or not- p ’ is always necessary, and this necessity is what we are familiar with. But—and this . . . is a novelty to us—that when p describes a present or past situation, then either p is necessarily true or $\sim p$ is necessarily true; and here ‘necessarily true’ has a sense which is unfamiliar to us.”³⁵ This sense of necessity is said to have something to do with the unalterability of the past. Events which have occurred no longer have any potentiality for being otherwise, so that it is futile to try to change the past, as Aristotle explains:

(It is to be noted that nothing that is past is an object of choice, e.g. no one chooses to have sacked Troy; for no one *deliberates* about the past, but about what is future and capable of being otherwise, while what is past is not capable of not having taken place; hence Agathon was right in saying¹

For this alone is lacking even to God,
To make undone things that have once been done.)

¹ Fr. 5. Nauck.³⁶

This fascinating passage is interesting both for its relevance to the issue of fatalism and for its theological application. As in *De interpretatione* 9, the future is said to be the object of deliberation and choice because it is open to alternate possibilities; by contrast the past is not capable of being otherwise because it has already taken place and is not therefore an object of choice. The point seems to be that the past is fully actualized and is therefore incapable of being other than it is. Aristotle elsewhere, in a passage tucked away in his *Rhetoric*, implies that the same is true of the present: Deliberative oratory, he says, “is concerned with the future, so that its examples must be derived from the past,” but forensic oratory is concerned “with the question of the existence or non-existence of facts, in which demonstrative and necessary proofs are more in place; for the past involves a kind of necessity.”³⁷ Here the matters of fact, which include past and perhaps present events, are said to be necessary. It

would seem that the same sort of necessity that characterizes past/present events also characterizes propositions about those events. If p is a true past/present proposition, then p will be true with temporal necessity, that is, though it is logically possible for p to be false, it is temporally impossible. By contrast, for any true future proposition p , p will be true with temporal contingency, for it is still possible for p to be false.

The situation is not, however, so simple. For suppose for some future event x that x is causally determined by present existents. Is the proposition predicting the occurrence of x nonetheless contingent? It would seem not, for, as Anscombe points out, Aristotle would regard the future motions of the heavenly bodies as necessary, though they are not yet actualized.³⁸ Presumably then he would affirm that propositions describing such motions would be necessary. The necessity therefore at issue must be more than temporal necessity, for some future singular propositions do indeed appear to be necessary in a non-logical sense. This leads Strang to distinguish two kinds of relevant necessity/possibility: temporal and causal. A future event, while not temporally necessary, may be causally necessary. "Basically, as an event or state of affairs is necessary if it is out of the question to try and make it otherwise, whether because it has already happened (temporal reasons), or because it is already determined (causal), or because the very assumption of its being otherwise leads to absurdities (logical), or for any other reason. . . ."³⁹ Thus for Strang, future contingent singular propositions are unlike past/present propositions in being neither temporally nor causally determined. This interpretation of the notion of necessity in question seems to have gained wide acceptance. Ackrill, for example, agrees that Aristotle "would say that it is necessary that p is true if the present state of affairs makes it certain that the p -event will occur, or again if the p -event has already occurred."⁴⁰ Hence, interpreters of the second camp maintain that for Aristotle future contingent singular propositions are either true or false, but that they are not necessarily so because the events they describe have neither occurred nor are causally determined.

There are, however, two passages in Aristotle which are crucially relevant to this interpretation, and though they are difficult to reconcile with each other, neither of them appears to support this understanding of Aristotle's meaning. First is the important eleventh chapter of book two of *De generatione et corruptione*. Here Aristotle inquires whether in the temporal series of events there are any "whose future being is necessary" (ὅ ἐξ ἀνάγκης ἔσται) or whether all of them "may fail to come-to-be (ἐνδέχεται μὴ γενέσθαι)."⁴¹ He furnishes two arguments to substantiate the fact that not all future existents are necessary:

(a) We need only appeal to the distinction between the statements 'x will be' and 'x is about to . . .', which depends upon this fact. For if it be true to say of x that it 'will be', it must at some time be true to say of it that 'it is': whereas, though it be true to say of x *now* 'it is about to occur', it is quite possible for it not to come-to-be—thus a man might not walk, though he is now 'about to' walk. And (b) since (to appeal to a general principle) amongst the things which 'are' some are capable also of 'not-being', it is clear that the same ambiguous character will attach to them no less when they are coming-to-be: in other words, their coming-to-be will not be necessary.⁴²

In the first argument Aristotle distinguishes between what will be (τὸ ἔσται) and what is about to or going to be (τὸ μέλλον). The former is expressed in a future-tense statement; the latter, despite the appearance of futurity, is expressed in what is really a present-tense statement concerning present conditions or inclinations. Future-tense singular propositions are true only in the case of those events which will actually occur. Present-tense propositions about events that are going to occur may be true even if the events do not in the end take place. Aristotle here associates necessity with those events belonging to the first class and contingency with those of the second class. In the second argument he maintains that among beings which exist some are capable of not existing, while others have no possibility for non-existence. As we shall see further, he again associates one class with necessity and the other with contingency. His point here is that if some existents are not necessary in their being, then neither will they be necessary in their coming-to-be. Now, he proceeds, are all future existents contingent or absolutely necessary in their coming-to-be?⁴³ Is there in the realm of coming-to-be a distinction corresponding to the distinction in the realm of being between things that can not-exist and things that cannot not-exist? Indeed there is. Aristotle observes that if a consequent will come-to-be, then its antecedent condition must also come-to-be. For example, if there will be a house, then the foundations must have come-to-be previously. On the other hand, if an antecedent has come-to-be, then the consequent need not come to be—unless the consequent is absolutely necessary. If it is the case that the consequent will necessarily exist, then given the antecedent, the consequent must exist—not, Aristotle cautions, because of the antecedent, but "because the future being of the consequent was assumed as necessary" (ὅτι ὑπέχειτο ἐξ ἀνάγκης ἐσόμενον).⁴⁴ Now in the realm of becoming, he continues, such absolute necessity of coming-to-be seems to be scarce. In the first place, in any descending infinite causal series (that is, proceeding from cause to effect), the members of the series are only conditionally necessary, not absolutely necessary. Each member is conditionally necessary for its coming-to-be upon the existence of its

predecessor. The application would seem to be that in the temporal series of events, events existing in such a chain are only conditionally necessary in their coming-to-be. In the second place, even in a finite causal series, there is no absolute necessity that any one member should come-to-be. Here Aristotle introduces his very important equivalence between necessity and everlasting duration:

...if its coming-to-be is to be 'necessary', it must be 'always' in its coming-to-be. For what is 'of necessity' coincides with what is 'always', since that which 'must be' cannot possibly 'not-be'. Hence a thing is eternal if its 'being' is necessary: and if it is eternal, its 'being' is necessary. And if, therefore, the 'coming-to-be' of a thing is necessary, its 'coming-to-be' is eternal; and if eternal, necessary.⁴⁵

The eternal or everlasting is equivalent to the necessary because in an infinite duration of time every possibility will be actualized. Therefore, only the necessary can endure for infinite time. Hence, in Aristotle's view, if a thing's becoming is necessary it must be in a state of eternal becoming. But he continues, only cyclical becoming can be an eternal coming-to-be. In cyclical becoming, the relation of conditionality between antecedent and consequent is symmetrical throughout the process. Where is such cyclical coming-to-be to be found? The answer, of course, is in the eternal circular motion of the spheres and in all cyclical motion they initiate, for example, the change of seasons, the water cycle, and so forth. Aristotle recognizes that not all coming-to-be appears to be like this, for example, the generation and corruption of men and animals; but he suggests that in cases where the substance perishes, there is a recurrence not of the same individual, but at least of the same type of individual.

Now the upshot of this discussion would seem to be this: Aristotle implies that it is only events which are part of an everlasting cyclical process that are necessary and therefore *ἐσόμενα*, things that will be. Events which occur as part of a rectilinear process are contingent and therefore *μέλλοντα*, things that are about to be. Future singular propositions can therefore only be true (or false) when they speak of events in necessary cyclical processes. It is for this reason that Anscombe includes propositions about the motions of heavenly bodies with past/present propositions as being necessarily true. But further qualification would seem to be required. For on this analysis, not only would many future-tense propositions about future singulars not be necessary; they could not even be *true* (or false). For "*x* will be" is true only if *x* is a member of a necessary cyclical process and false only if *x* is excluded from such a process. If *x* is a member of a rectilinear causal chain or is uncaused in its becoming, then all that can be truly said is that "*x* is going to be";

but “*x* will be” would appear to be devoid of truth value. While Aristotle’s use of ἐσόμενα and μέλλοντα does not carry over to *De interpretatione*, the view that future contingent propositions lack truth value is a common theme.

The second important passage occurs in *Metaphysics* E.3. The context is a discussion of the accidental (τὸ συμβεβηκός). According to Aristotle, among things which exist, some are always in the same state and exist of necessity (not in the sense of compulsion, he adds, but in the sense that they cannot be otherwise), some do not exist necessarily or always, but for the most part, and some exist neither always nor for the most part and are therefore accidental.⁴⁶ The majority of things fall into the second category and correspond to what we might call the regular pattern of nature. But an event occurs accidentally or fortuitously by chance intersection of independent causal lines. An accidental event as such has only an accidental cause; there are no causes which regularly operate to produce accidental events as such. Hence, science has no dealing with the accidental, since its occurrence is not law-like. In the passage under consideration Aristotle queries whether future accidental causes are themselves ever in the process of coming-to-be or passing away:

That there are principles and causes which are generable and destructible without ever being in course of being generated or destroyed, is obvious. For otherwise all things will be of necessity, since that which is being generated or destroyed must have a cause which is not accidentally its cause. Will *A* exist or not? It will *if B* happens; and if not, not. And *B* will exist if *C* happens. And thus if time is constantly substracted from a limited extent of time, one will obviously come to the present. This man, then, will die by violence, *if* he goes out; and he will do this if he gets thirsty; and he will get thirsty if something else happens; and thus we shall come to that which is now present, or to some past event. For instance, he will go out if he gets thirsty; and he will get thirsty if he is eating pungent food; and this is either the case or not; so that he will of necessity die, or of necessity not die.⁴⁷

Here Aristotle is concerned to show that if accidental causes do not come into existence spontaneously, that is, without being generated as such by a prior cause, then we are locked into a causal determinism. He seems in this passage to extend the range of ἐσόμενα from events in cyclical processes to events in rectilinear causal chains. Event *A* will exist if it is tied to the present by a determinate chain of causes which, *ex hypothesi*, cannot be interrupted by any accidental effect. Hence, if the man in question is now eating the pungent food, then he will of necessity die by violence. The truth of the future singular proposition is guaranteed by the causal determinacy of the event, even though the event is not dependent upon cyclical motion. This seems odd, for we have seen that Aristo-

tle has just reaffirmed that that which exists necessarily always exists in the same state. Yet here he seems to assert that an event in a rectilinear causal sequence happens necessarily. On the other hand, it may be that for Aristotle any sequence of purely non-accidental causes must be cyclical, so that a rectilinear sequence of such causes would be impossible.⁴⁸ Aristotle seems to agree that “Everything, therefore, that will be, will be of necessity...” (ἐξ ἀνάγκης ἄρα πάντα ἔσται τὰ ἐσόμενα); that is to say, the range of ἐσόμενα is co-extensive with events that occur necessarily.⁴⁹ His example is consistent with his comments in *De generatione*: it is necessary that a living man die because the condition for death is already in existence, namely, the presence of contraries in the same body. This could be read to mean that in the apparently rectilinear process of life and death a necessary cyclical process is finding expression in the generation and corruption of successive perishable substances of the same species. But, he insists, *how* the man is to die, whether by disease or violence or whatever, is not yet determined. The causal chain leading to his death goes back to a certain starting-point, presumably a contingent event, for which no prior determinate causal chain may be traced. But what about things that happen for the most part? Aristotle’s position with regard to such events, which are after all the majority of cases, is not clear. Since they are causally determined, do they occur non-contingently? One would, perhaps, think so from this passage; but in *De interpretatione* 9.19a7-23 he states that the possibility of being and not being is open for all things except those which always exist—even in the case of things that happen for the most part, it is still possible for something else to happen instead.⁵⁰ This would suggest that he holds consistently to the same view as expressed in *De generatione*.

However this may be, once again the upshot of the passage runs counter to the position of the non-standard interpretation. For Aristotle seems to maintain that if a genuinely future-tensed proposition about some event *E* is to be now true (or false), then *E* (or not-*E*) must be causally determined by a series of causes extending from the present or past to *E* (or not-*E*).⁵¹ Or again, only causally necessary future singular propositions are true or false. Future contingent singular propositions are not only not necessary; they are not even *true* (or false), for we can only affirm that event *E* will occur *if* events *E*₁, *E*₂, and so forth also occur. Lacking those determinate conditions, future contingent singular propositions cannot be presently true or false.

Therefore, whatever notion of necessity one selects on the basis of these passages—everlasting duration or causal determinacy—the same conclusion seems to follow: if future contingent singular propositions lack this mode of necessity, then they also lack a truth value; for only future

singular propositions characterized by such necessity possess truth values at the present time. Even in the passages cited earlier on the unalterability of the past, there is no indication that Aristotle held that propositions about future contingent singulars are true; indeed, the hint is that they are neither true nor false. This, however, undercuts the non-standard interpretation, for according to that camp, future contingent singular propositions do lack the mode of necessity in question, but are nonetheless true or false. Such an understanding seems to be internally inconsistent on Aristotelian principles.

Besides this, it needs to be questioned whether this interpretation of the introductory section has not qualified it so extensively as to have distorted its meaning. The initial ambiguity was said to conceal the distinction between $\Box(p \vee \sim p)$ and $\Box p \vee \Box \sim p$. This was intended to differentiate past/present propositions from future propositions with a view toward temporal necessity. That distinction, however, proved to be trivial. So a second sort of necessity—causal necessity—is introduced, one which may not in fact characterize any given past/present proposition, and this sort of necessity is said to characterize certain future singular propositions, such that in their case $\Box p \vee \Box \sim p$ does hold. This taxes the simple language of the introduction so severely that one would seem to be justified in suspecting that this is eisegesis, not exegesis.

Perhaps it was considerations of this sort that led Jaakko Hintikka to formulate a different understanding of the necessity operative in this chapter. If Aristotle were concerned primarily with the problem of future truth, he admits, then it would be plausible to think that his solution consisted in abandoning the law of Excluded Middle for future contingent singular propositions.⁵² This, however, is not the case. Aristotle's primary concern is the problem of omnitemporal truth. In order to understand this, we need to realize the intimate connection in Aristotle's mind between modal and temporal considerations. Aristotle agreed with his contemporary Diodorus Cronus that the possible is that which either is or will be true, even if this is not the definition of the possible.⁵³ To suggest that a genuine possible could remain unactualized for infinite time would be to evacuate the meaning of the impossible.⁵⁴ Therefore, that which exists for infinite time is necessary. Hintikka summarizes Aristotle's thinking:

(T) no unqualified possibility remains unactualized through an infinity of time.

Hence, if something can possibly exist, it sometimes will exist in fact. Hence, the only things that *never* are, are the impossibilities. Thus we obtain the following variant of (T):

(T)¹ that which never is, is impossible. By the same token what never fails to be, cannot fail to be, that is, is necessarily:

(T)² What always is, is by necessity.

For some purposes, we might reformulate (T)² as follows:

What is eternal is by necessity.⁵⁵

Hintikka explains that by “eternal” one means, not timeless, but omnitemporal, existing at all times. This analysis provides insight into Aristotle’s conception of necessity and contingency:

For Aristotle what is contingently is not by necessity, and hence possibly is not. If this possibility is sometimes realized, the contingent cannot be eternal. Thus contraposition yields the following form of the principle:

(T)³ nothing eternal is contingent.

By ‘contingent’ we mean here ‘neither necessary nor impossible.’⁵⁶

Hence, for Aristotle necessity is equivalent to eternity.⁵⁷ Impossibility is equivalent to existence at no time. Possibility is equivalent to existence at some time. Hintikka qualifies this, however, in restricting the applicability of these equivalences to classes of things. For example, in *De interpretatione* 9 Aristotle says that it is possible both that a coat be cut up or that it wear out. How can both be possible if the possible is equivalent to sometime existence, since the two states of affairs are mutually exclusive? According to Hintikka, the equivalence between possibility and sometime existence holds only for coats’ wearing out or being cut up *in general*. If no coats ever wore out, then wearing out would not be a genuine possibility for any coat. But given that sometimes coats do wear out, in this specific case it is possible that this coat wear out, even if that possibility is never realized because it is cut up first. Hintikka explains,

The possibility of a particular cloak’s being cut up is a possibility concerning an individual object, and not a possibility concerning kinds of individuals or kinds of events. Not does the unfulfilled possibility Aristotle mentions remain unfulfilled through an infinity of time, for when the cloak wears out, it goes out of existence, and no possibility can any longer be attributed to it. Thus Aristotle’s example does show that the ‘genuine’ possibilities which the principle says are actualized do not for him include possibilities concerning individual objects which only exist for a certain period of time.⁵⁸

Hence, it is in application to kinds of things in general that these equivalences hold.

Now what is the case concerning kinds of things is also true of general propositions about those things. If a statement is always true then it is necessary, and if it is sometimes true then it is possible.⁵⁹ Paradoxically, the distinction between assertoric universal statements and apodeictic generalizations disappears. All modal statements may be reformulated in terms of temporal duration, as always true or sometimes true. It follows that the only true temporally unrestricted universal statements are the necessary ones.

This analysis is said to supply the key to the interpretation of Aristotle's fatalistic difficulties in *De interpretatione* 9. We have seen that "In passage after passage, he explicitly or tacitly equates possibility with sometime truth and necessity with omnitemporal truth."⁶⁰ Normally, this occasions no difficulty for Aristotle, for he thinks of truth as applying primarily to sentences that are token-reflexive in that they contain a reference to the moment of time at which they are uttered. For example, "Socrates is now sitting" is token-reflexive and is possibly true if there is some time at which it may be truly uttered. Such sentences change their truth value depending on what is the case at the time of utterance. The same holds for sentences with indefinite temporal indexicals such as "yesterday" or "tomorrow." But Aristotle runs into difficulties if we consider sentences of the form " p at t_0 ," where t_0 is a definite temporal indexical, for example, "Socrates is sitting at 403 B.C." Such statements, if true at all, are always true and, hence, necessarily true. Therefore, all sentences of the form " p at t_0 " will be either necessarily true or necessarily false. It is this difficulty that bursts to the surface in *De interpretatione* 9. For all true propositions about future singulars will have been true for an infinity of past time. Since they have always been true in the past, they cannot change, and hence they express what cannot possibly be otherwise. Thus, Aristotle's main difficulty was not the metaphysician's "vague worry" about whether present truth about the future prejudices future events; rather it was the difficulty of a systematist who had defined his notions for too narrow a range of cases:

On this interpretation, Aristotle's problem was not primarily due to the apparent difficulties involved in the application of *tertium non datur* to statements about future events. It was generated rather by the fact that statements about individual future events have *always* been true if they are true at all. Statements of this kind were thought by Aristotle as being true or false *necessarily*. Aristotle's problem is thus primarily that of *omnitemporal* truth—or more accurately, that of *infinite past* truth—rather than that of future truth.⁶¹

Aristotle proposes to solve the problem of omnitemporal truth by making a distinction between saying that something is necessary *when it is* and that it is necessary unconditionally. A statement unconditionally necessary would be of the form "necessarily p ", while a proposition conditionally necessary would have the form "necessarily p -at- t_0 " (that is, being necessary *when it is* means being necessary with reference to a designated time). On Aristotle's view, if " p at t_0 " is true, then so is "necessarily p -at- t_0 "—but it is not *unconditionally* necessary. Hintikka grants that Aristotle's solution provides no satisfactory escape from fatalism, since future-tense singular propositions are still omnitemporally

and hence necessarily true; but even though Aristotle does not expose a fallacy, he does re-interpret the fatalist's conclusion in an attempt to remove its sting: future singular propositions are not *unqualifiedly* necessary. According to Hintikka, what really mattered to Aristotle was that statements which lack a definite temporal indexical should not be necessary. So long as such statements are not necessary, it does not really matter whether statements with a definite temporal indexical are conditionally necessary. If I say today, "A sea battle will occur tomorrow," that statement is not true of necessity because such a statement is in different circumstances sometimes true and sometimes false. "In other words, if one asserted the contingency of tomorrow's sea fight, one is not any more speaking of *this* individual naval engagement, one is speaking, however eliptically, of similar sea fights in the past and in the future."⁶² In short, future-tense sentences of the form "*p*" turn out not to be singular propositions at all and thus may be true without being necessarily true.

By contrast, continues Hintikka, the standard modern interpretation ascribes to Aristotle the absurdity of affirming the truth of a disjunction while denying the truth of either disjunct, a view which deserved the ridicule of Cicero and Quine. In fact, when in section III of chapter 9 Aristotle introduces his distinction between necessity and conditional necessity, he is not talking about disjunctions, but about individual future events. He then discusses the necessity of the disjuncts, not of the whole disjunction. His point is that for any temporally unqualified proposition *p*, it is not the case that $\Box p \vee \Box \sim p$. Finally, he affirms for the whole disjunction $\Box(p \vee \sim p)$.

It is in this light that section I must be read, according to Hintikka. The opening statement (18a-28-9), which Aristotle will disallow for future singular propositions, is "not unambiguous": it may mean either $\Box(p \vee \sim p)$ or $\Box p \vee \Box \sim p$.⁶³ To discover what Aristotle means we must turn elsewhere. Hintikka appeals to the previously cited passages on the necessity of the past, which he takes to mean that true statements about the past/present are necessary in the usual Aristotelian sense, presumably in that they are omnitemporally true. Since Aristotle undoubtedly believed that $\Box p \vee \Box \sim p$ held for past statements, this suggests that in the introduction Aristotle is denying this holds for future statements. Moreover, in 19a39-b4 Aristotle sums up his position by repeating the denial of section I. Though this passage, too, is ambiguous, the context provides the clue to the meaning. He is summing up his solution, in which he denied, not $\Box(p \vee \sim p)$, but $\Box p \vee \Box \sim p$. Hence, there does not seem to be any room for doubting that what Aristotle wants to deny is $\Box p \vee \Box \sim p$, both in his closing and opening sentences of the chapter. But, it might be

asked, how can Aristotle maintain that $\Box p \vee \Box \sim p$ holds not only for past/present propositions, but also for universal statements taken universally? The answer is that he means that in an *antiphrasis* of such propositions one is true *always* and the other is false *always*, that is to say, *ἀεί* and *ἀνάγκη* are synonyms in this section. And we have already seen that for Aristotle the difference between assertoric and apodeictic (necessary) propositions dissolves for unrestrictedly universal statements. On the strength, then, of section III, Hintikka feels confident to interpret the introduction as denying that future-tense propositions which lack definite temporal indexicals are omnitemporally true, that is, necessary.

Despite the vast scholarly resources which Hintikka brings to his task, it must be said that the interpretation he gives of Aristotle's argument in *De interpretatione* 9 seems very implausible. First, his account of Aristotelian necessity and possibility with regard to statements may be called into question. On Hintikka's interpretation, a statement is necessary if it is omnitemporally true and possible if it is sometimes true. This formulation is ambiguous, however, since in this case the possible does not exclude the necessary. What Hintikka evidently means is that a proposition is contingent if it is sometimes true but not always true. In his discussion "possible" is taken in this sense of "contingent." Essential to Hintikka's interpretation are two inferences: (1) that the parallel between semantics and reality is such that if beings are possible/necessary, then statements about those beings are also possible/necessary, and (2) that the analysis of the possibility/necessity of beings in terms of duration of their existence is paralleled by the analysis of the possibility/necessity of statements in terms of duration of their truth. Now it is undoubtedly the case that Aristotle in many places speaks of beings as necessary if they always exist and possible if their existence is temporally limited. But is Hintikka justified in taking these physical notions of necessity and possibility and transferring them to statements? Frede thinks not.⁶⁴ She points out that in every case, Hintikka's supporting texts speak of necessity or possibility with regard to beings, not statements. Things exist necessarily or possibly depending on the extent of their temporal duration, or again, they may on the same basis be said to be necessary or possible beings. But Aristotle never transfers this ontological necessity to statements.⁶⁵ Of course, a statement about a necessary being will be always true—but Hintikka unjustifiably infers that a statement which is always true is necessary. Frede notes that Aristotle almost never uses the expression *ἀεί ἀληθές*, so that it is difficult to believe it is for him a term so fraught with modal significance. In *Metaphysics* Γ.5.1010b24 Aristotle uses the phrase *ἀεί ἀληθεύει*, but means thereby only that one is "always correct" concerning the thing in question. Then in *Metaphysics* Θ.10.105b 13-16 he states,

Regarding contingent facts, then, the same opinion or the same statement comes to be true and false, and it is possible for it to be at one time correct and at another erroneous; but regarding things that cannot be otherwise opinions are not at one time true and at another false, but the same opinions are always true or always false.⁶⁶

Here he emphasizes the same opinions are always true or false of unchanging entities. Outside *De interpretatione* 9, ἀεὶ ἀληθές is not used other than these two places. Hence, in no place does Aristotle equate the “always true” with necessary truth, though, of course, statements about what is necessary are always true.⁶⁷ Therefore, Hintikka’s interpretation of Aristotle’s modal concepts with regard to statements has insufficient basis.

In his revised version of “The Once and Future Sea Fight,” Hintikka takes notice of this objection, commenting, “It is hard to think of a suggestion that is more blatantly beside the point. . .”; Aristotle’s general characterization of truth in *Metaphysics* Γ.7.1011b26-7 shows that “. . . it is *true* to say that *p*, if and only if it is the case that *p*.”⁶⁸ Hence, everything said of truth in chapter 9 could have been said in terms of being. The same general idea as found in the above passage is introduced in chapter 9 itself in 18a39-62. The same point is applied in so many words to statements about the future in *De generatione* 2.11.447b4-5. Moreover, in Aristotle’s solution in section III he moves back and forth without compunction between a future *event* (or pair of contradictory future events) and the *truth* or *falsity* of a statement about such an event. Therefore, any objection based on the contrast between being and truth “is without a shadow of substance.”⁶⁹

Hintikka’s reply is perplexing. Clearly Aristotle does hold to a view of truth as correspondence, as the above three passages attest. This may be (and is) acknowledged on all hands. It means merely that if a proposition is true, then reality must be as the proposition describes it and *vice versa*. But how does this warrant the inferences (1) that when necessity/possibility is ascribed to beings, statements about those beings are also necessary/possible, and (2) that the necessity/possibility attaching to propositions is analyzable in terms of omnitemporal/quasitemporal truth? Hintikka is apparently unable to adduce any texts in which Aristotle makes such inferences. In fact, emphasizing Aristotle’s view of truth as correspondence seems to lead, not to the conclusion that future contingent singular propositions lack necessity, but that they lack truth value. This seemed to be the implication of the *De generatione* passage. Since a true proposition necessarily corresponds with reality, the events described by a future singular proposition must come to pass. Therefore, if contingency is to be preserved, future

contingent singular propositions must not be true or false. Hence, I fail to see any support for Hintikka's interpretation in Aristotle's view of truth as correspondence. If Aristotle's general characterization of truth, cited above, means only " p iff p ," then this goes nowhere in justifying Hintikka's interpretation; but if Hintikka means something more in adding "*it is the case that*," then he has not justified his appeal to this as his starting point. As for Aristotle's solution, a detailed examination will be reserved for later. That pending, it seems to me that Hintikka has failed to turn back the force of Frede's objection. He has without sufficient warrant transformed an Aristotelian doctrine about the necessity/possibility of things as analyzed in terms of temporal duration of existence into a linguistic modal theory in which the necessity/possibility of statements is analyzed in terms of their temporal duration of truth.

Furthermore, it is not clear that Hintikka has consistently applied this understanding of necessity/possibility to statements. For Aristotle the eclipse of the moon which occurred last night was necessary, for it was the result of an eternal cyclical motion on the part of the spheres. But how is it the case that the statement "A lunar eclipse occurred last night" is necessary? This does not appear to be omnitemporally true. For if this statement is of the form " p at t_0 " then it was not true until after the event; thus, it, far from being always true, has been true only for a very short time. Even if one says that it will hereafter be always true, it is still false to say it is always true. Indeed, given Aristotle's eternal universe, the statement has been forever untrue even as it shall be forever true (eternity past versus eternity future). On the other hand, if the statement is of the form " p ," then again it is not always true, but only becomes and remains true on the day after a lunar eclipse. Far from being always true, it is in fact rarely true. The situation seems analogous for contingent statements. For although the existence of possible beings in the universe is itself a contingent matter, since it is possible to have a universe devoid of contingency, how is the statement "Possible beings exist" a contingent statement? For it has been always true and will be always true. Hence, this statement is on Hintikka's interpretation necessary. Even if it should be the case that all possible beings perish tomorrow, it remains the case that "Possible beings exist" has always been true and should thus be necessarily true. Now Hintikka realizes that consistent application of his definitions of necessary/possible creates difficulties with regard to past-tense statements.⁷⁰ But, he insists, with regard to singular future-tense statements, they still yield fatalism. For any singular future-tense statement will have been true for an infinity of past time, and whatever has remained unchanged for an infinity of past

time cannot ever be changed. For this reason Hintikka in his previously quoted statement qualifies the problem from that of omnitemporal truth to that of infinite past truth. But does not this very qualification reveal an inconsistency? The fact is, singular future-tense statements are no more omnitemporally true than past-tense statements. Once the events occur, the future-tense predictions are no longer true. Hence, "There will be a sea battle tomorrow" is not omnitemporally true; indeed, given that it is genuinely singular statement about a future battle at t_n , it will be forever untrue even as it has been forever true. But then what is the peculiar significance of the fact that it has been true for eternity past? Just that whatever has remained unchanged from eternity past cannot change, replies Hintikka. But this seems to be a clear example of the unwarranted conflation of ontological and semantical necessity. When Aristotle says that a being existing from eternity cannot change, he has reference to a whole array of implicit metaphysical notions such as form and matter, actuality and potentiality, which seem inapplicable to statements. A being existing unchanged from eternity is immutable either because it is a pure form or because the potentiality of its matter to further change has been exhausted by its forms. But for a sentence true from eternity to change its truth value violates no such constraints. And in point of fact true future-tense sentences *do* change their truth value after the predicted event has occurred, for the future-tense prediction then becomes false. A being existing unchanged from eternity will remain unchanged to eternity, but a future-tense sentence cannot be omnitemporally true, but must change in truth value. Therefore, it seems that Hintikka's interpretation of Aristotle's alethic modal concepts in terms of omni-/quasitemporal duration cannot be consistently put through. Of course, it could be said that these are objections to Aristotle's view, not to the interpretation of that view. But the inconsistencies surely help to call into question the validity of the inferences which we saw lack textual support in Aristotle, namely, that because a being is necessary/possible a statement about that being is necessary/possible and that alethic modality in statements as well as ontological modality in being are both to be analyzed in terms of temporal duration. It seems to me that we may legitimately call into question an interpretation which lacks sufficient textual support and which cannot be consistently applied or accommodated to Aristotle's views.

Secondly, it may also be called into question whether Hintikka's representation of the problem in *De interpretatione* 9 in terms of infinite past truth is a plausible one. Although we may reserve more detailed comment for our discussion of the text, it should be apparent to any reader that the problem of infinite past truth does not, at least ostensibly,

loom very large is this chapter. Even Hintikka admits that in 18a34-b9 Aristotle first derives a version of the problem of future truth, which shows that “...to some extent, he is also worried about the problem of future truth and not only the problem of infinite past truth.”⁷¹ Nevertheless, he insists, Aristotle’s fullest statement of the problem (18b9-14) suggests very strongly that he is primarily worried about the fact that a true prediction has been true for an infinity of past time. Moreover, there is no trace of the problem of future truth in Aristotle’s solution.

Thus, Hintikka himself must acknowledge that the problem of future truth does play a role, if subordinate, in Aristotle’s reasoning. But is this problem eclipsed by the problem of infinite past truth? This seems very doubtful. In general, Aristotle’s concern might best be called the problem of antecedent truth. His concern seems to be that if a proposition about an event is true prior to that event, then the event is fated to occur. The statement may be antecedently true now (step II.A.2) or antecedently true in the past (II.A.3).⁷² The second situation gives the problem a slightly different complexion, since the past cannot be changed, but the problem remains fundamentally the same: the antecedent truth of a future contingent singular proposition necessitates the eventual eventuation of the event in question. Hintikka’s interpretation of Aristotle’s second statement of the problem as that of infinite past truth rests on the single word “always” (ἀεὶ) and on 19a1 “in the whole of time” (ἐν ᾧ παντὶ τῷ χρόνῳ). But there is no indication that “always” has the crucial significance in the argument which Hintikka attributes to it. The *antiphrasis* concerning the thing’s being white is the same in both arguments, except for the tense of the propositions. The argument depends primarily on a statement’s being true in the past. Being “always” true in the past only serves to add weight to its pastness. Aristotle does not reason that because it was always true to say that *x* would be so, it is necessary to say that *x* will be so; but rather because it was always true to say that *x* would be so, *x* cannot fail to occur. Therefore, *x* happens necessarily. The problem concerns the antecedent truth of the proposition about *x*. That this is so is confirmed by Aristotle’s discussion of the absurdities of fatalism in 18b26-19a6. His pointing out that someone could say 10,000 years prior to *x* that *x* would occur is a past-tense version of the situation envisioned in 18a36-7. This appears to show that it is merely the pastness of the utterance which matters. But not even that; for then he points out that it is not even the utterance of the true proposition which matters: what matters is its simply being true. Nor is the 10,000 year figure important, he adds; *any* prior time will do the trick. So when he says, if in the whole of time one or the other proposition of an *antiphrasis* is true, then fatalism results, what he evidently

means is that given any arbitrary moment in the whole of the past, the argument holds good. Hence, the emphasis in both arguments is on a future-tense proposition's being antecedently true. As for Aristotle's solution, we again defer our discussion until later; but one may note in passing that the question of the sea battle tomorrow, which Aristotle picks up again in the solution, comes from 18b24-5 where the discussion concerns whether what is true today about tomorrow will have to hold tomorrow, or in other words, the problem of future truth.

Besides this, if the problem were that of omnitemporal truth, then Aristotle's "solution" would be very peculiar. If it is the case that future singular propositions, if true, would be omnitemporally true, and hence necessary, then the most obvious escape route would seem to be to deny that such propositions are true or false. Thus, the problem of omnitemporal truth is voided. But on Hintikka's reading Aristotle's answer is to agree that all future singular propositions are necessary. The disclaimer that they are conditionally necessary is vacuous, since all that means is that future singular propositions are necessary because they are singular. The only contingent future propositions are non-singular. But that raises the possibility of a different solution, even more amenable to Hintikka's Aristotle, that would seem a likelier escape from fatalism. Why not hold that all future-tense propositions are really non-singular? According to Hintikka there is not in the entire Aristotelian corpus a single example of a sentence of the form " p at t_0 ".⁷³ Is it not then more likely for Aristotle to reply to the fatalist that "There will be a sea battle tomorrow" and other future-tense singular propositions are really elliptical generalizations of the form " p "? Since such statements are not necessary, fatalism is undercut. Hence, on Hintikka's own analysis of Aristotle's deeply ingrained habit of thinking in terms of temporally indefinite sentences, the solution one expects is that future-tense statements of the form " p at t_0 " are actually elliptical versions of the generalization " p " which covers all such similar events. Instead, we get a solution which solves absolutely nothing and indeed affirms of future singular propositions what Aristotle supposedly denies in the introduction, namely $\Box p \vee \Box \sim p$.⁷⁴ Thus, not only does the statement of the fatalistic difficulties not seem to hinge on the issue of omnitemporal truth, but in addition, if that were the issue, then Aristotle's solution on Hintikka's reading becomes unlikely and unavailing.

That brings us full circle back to the question of what Aristotle is doing in the introduction. Hintikka like Anscombe, Strang, and Rescher speaks of ambiguity in Aristotle's statement of the thesis to be denied of future singular propositions. Now, despite Ackrill⁷⁵, I think we must admit that the thesis to be denied is ambiguous. But the ambiguity is

between a denial of the Principle of Bivalence and the Law of Excluded Middle. Are we to read Aristotle as saying:

1. It is necessary for the affirmation (or the negation) to be true or false (Principle of Bivalence)
- or 2. It is necessary for the affirmation or the negation to be true (or false) (Law of Excluded Middle)

There is no ambiguity between $\Box(p \vee \sim p)$ and $\Box p \vee \Box \sim p$ to be found in the introduction, whether this ambiguity is said to be a deliberate strategy or to lodge in the statement of *tertium non datur* as such. The only ambiguity that arises concerns Bivalence and Excluded Middle—hence, Anscombe’s confusion between what she takes to be first an ambiguous and then a clear statement of the thesis—, but, I have argued, it is plausible to believe Aristotle begins by denying Bivalence and later Excluded Middle. We have seen furthermore that attempts to read in a peculiarly Aristotelian brand of necessity/possibility which attached only to past/present propositions have not been convincing. In any case, contextual and grammatical considerations militate against seeing any such distinction such as is alleged by the non-standard interpretation in the text of section I.⁷⁶ When for example in 7.17b27-30, Aristotle asserts that indefinite statements in an *antiphrasis* must be the one and the other false, surely he is not saying that all other statements are necessarily true or necessarily false, while indefinites are simply true or simply false. Similarly in chapter 9: what does not hold for indefinite sentences holds for universal and particular statements, namely, the Law of Excluded Middle. Grammatically, too, it is unlikely that Aristotle means in his opening statement to distribute the necessity among the disjuncts. It would be merely awkward in 18a28 for ἀνάγκη to be distributed among ἀληθῆ ἢ ψευδῆ, given the accusative *cum* infinitive separating them; but more difficult problems arise in the connection of ἀνάγκη with 18a30-33. For in 18a30 the necessity concerning universals is collective, $\Box(p \vee \sim p)$. But since ἀνάγκη in 18a28 governs καὶ ἐπὶ μὲν τῶν καθόλου in 18a30, it seems implausible to suppose that the same word stands in one case for distributed necessity and in the next for collective necessity. In both cases, the necessity attaches to the *dictum* as a whole.

How does the interpretation of Aristotle’s solution affect this reading of the introduction? The summary in 19a39-b4 seems to support the standard modern interpretation of Aristotle. He starts and ends by denying that all future contingent singular propositions have a truth value. If one rejoins that the context shows that he means to deny future contingent singular propositions are true or false necessarily, then this solution says nothing against the fatalist’s argument from antecedent truth.⁷⁷ For the fatalist does not just *assume* $\Box p \vee \Box \sim p$; he *argues* to it on

the grounds of the antecedent truth of future singular propositions. The mere denial that such propositions are necessarily true/false fails to refute the argument.

In sum, we have seen that in the introductory section Aristotle sets the stage for his discussion of the problem at hand. What holds for all past/present propositions—that every proposition must be true or false—does not hold for future singular propositions. Interpreters of the second camp have failed to distinguish any sense of necessity/possibility which applies *tout simple* to past/present propositions but not to future singular propositions in such a way as to permit the latter to be contingent but true, nor, alternatively, to justify assimilating Aristotle's alethic modalities to his ontological modalities. Finally, the appeal to ambiguity in the introduction as a basis for reading in some such modal category has been seen to be implausible.

II. Development of Fatalistic Difficulties

A. Threat of Fatalism

1. Of a contradictory pair of future contingent singular propositions, both cannot be true

We turn now to a discussion of section II of the chapter, Aristotle's development of the fatalistic difficulties. Under II.A (18a34-b16), the threat of fatalism, he sets the groundwork for his fatalistic difficulties by arguing in II.A.1 that of a contradictory pair of future singular propositions, both cannot be true (18a34-b4). Unfortunately, there are several textual variants in this passage which together considerably muddy the waters. If we follow the text of L. Minio-Paluello, which is the best and most recent edition, then it seems pretty clear that Aristotle is arguing in this passage that given the Law of Contradiction, the Principle of Bivalence entails that the Law of Excluded Middle holds for future singulars. The key to the passage seems to be the sentence: "For if one person says that something will be and another denies this same thing, it is clearly necessary for one of them to be saying what is true—if every affirmation is true or false; for both will not be the case together under such circumstances." The "for" (γάρ) marks this as the reason for the previous assertion, and the expression "if every affirmation is true or false" is clearly a statement of the Principle of Bivalence, thereby removing the ambiguity of 18a28, 34. The passage asserts that *if* the Principle of Bivalence holds for future singular propositions, then in an *antiphrasis* of such propositions it is necessary that exactly one is true—for both will not hold at some future time t_n (ὁπάρξει: the future tense is to be taken

seriously) simultaneously (ἄμα). Thus, it is an argument from Bivalence to Excluded Middle.

However, one important text, followed in the Ross and Cooke translations, reads “so” (ὥστε) instead of “for”, and three texts read “if every affirmation or [or, “and”] negation is true or false” (εἰ πᾶσα κατάφασις ἢ [καὶ] ἀπόφασις ἀληθὴς ἢ ψευδής). The first variant implies that this sentence follows from the previous assertion. This, however, does not seem to seriously alter the sense. On the other hand, the second variant destroys the clarity of the statement of Bivalence and leaves us with the ambiguity between Bivalence and Excluded Middle. To complicate the situation further, a number of manuscripts read καὶ instead of ἢ at 18a34, 38. If Aristotle did write “every affirmation and negation,” this could be taken as a clue to his meaning: every statement—that is, every affirmation and every negation—must be true or false; in other words an assertion of Bivalence.⁷⁸ On the other hand, the ambiguous “every affirmation or negation” may still be interpreted as the Principle of Bivalence: Ross and Cooke render 18a34 as “if all propositions whether positive or negative are true or false” or “propositions, whether positive or negative, being themselves true or false” respectively. But we should lack the clear statement of Bivalence in the Minio-Paluello text.

Following that text, however, Aristotle’s reasoning seems to have been captured perfectly in the earlier citation from Kneale. If the Principle of Bivalence holds for future singular propositions, then given Aristotle’s definitions of truth, the Law of Excluded Middle also holds of future singulars. When t_n arrives, both states of affairs described in the *antiphrasis* cannot obtain at once, and hence, p and $\neg p$ cannot both be true. For the proposition p is true iff the state of affairs S corresponding to p obtains, and reality is such that both S and not- S cannot simultaneously obtain. Since being is inherently non-contradictory in nature, two contradictory states of affairs cannot simultaneously obtain. But since the truth of a proposition consists in its correspondence with reality, neither can two contradictory propositions be true. An exception to this rule is indefinite propositions, precisely because of their indefiniteness—for they correspond in reality, not to the same, but to different subjects. Hence, they are bivalent, but exceptions to the Law of Excluded Middle. Aristotle makes clear, however, that the same exception does not apply to future singular propositions.⁷⁹ For being singular, both propositions in an *antiphrasis* refer to the same subjects and predicates, and given the Law of Contradiction governing the inherence of predicates in subjects, the Law of Excluded Middle must hold for the state of affairs referred to and thus, given Bivalence, to future-tense propositions about such a state of affairs.

It is noteworthy that Strang, who fails to distinguish Bivalence from Excluded Middle, cannot make sense of the reasoning in this passage. From Aristotle's definitions of truth alone, he asserts, one cannot derive the principle that of two contradictories one is true and the other is false. For p or $\sim p$ could lack of the truth values T or F, or they could both be true or both be false. If, however, *contra* Strang, we interpret Aristotle as arguing from Bivalence and his definitions of truth to Excluded Middle, then his conclusion follows, and the passage makes good sense. Bivalence assures that p and $\sim p$ must have the values T or F, while, despite Strang, Aristotle's assumption of the Law of Contradiction in his view of truth prevents both being true or both being false.

Hence on this interpretation, when Aristotle declares in 18a34 that it is necessary for everything to be the case or not to be the case, the predication of necessity is to be understood not distributively, but collectively. This seems to be fairly clear from the key sentence: it is necessary that one member of the antiphrasis be true, $\Box(p \vee \sim p)$ —both cannot be true. The illustration is intended to show why (note the $\gamma\alpha\rho$) both cannot be true: if it is true to say something is white (or not white), then, necessarily, the thing in question *is* white (or not white); and if the thing is white (or not white), then it is true to say it is white (or not white). By the same token falsity is involved in affirming what is not the case, and if a statement is false, then what it affirms does not obtain. Hence, he concludes, in an *antiphrasis* of future singular propositions necessarily either the affirmation or negation is true.

Unfortunately, here again the clarity is obfuscated by textual variants. My use of parentheses above indicates that two alternative statements are involved, not simply one disjunctive statement. Aristotle's point is not if it is true that $(p \vee \sim p)$, then necessarily $(p \vee \sim p)$ must obtain, but that if it is true that p , then necessarily p obtains. This interpretation would be clinched by the reading of one important variant, which has $\delta\tau\iota$ λευκόν η $\delta\tau\iota$ οὐ λευκόν ἐστίν, for the second $\delta\tau\iota$ indicates two separate statements are involved. But the Minio-Paluello text has the ambiguous $\delta\tau\iota$ λευκόν η οὐ λευκόν ἐστίν. To make matters worse, the conclusion in 18b4 reads in this same manuscript as well as others ἀληθῆ εἶναι η ψευδῆ rather than simply ἀληθῆ εἶναι. Hence, what was a wonderfully clear statement of Excluded Middle, derived from Bivalence, is rendered in nearly identical terms as the original statement of Bivalence.

As to the first difficulty, Aristotle must be speaking of two statements, for otherwise the argument is question-begging. For to assume $(p \vee \sim p)$ is true is to assume the Law of Excluded Middle, which Aristotle is seeking to derive. On the other hand, it is not evident why p iff p and $\sim p$ iff not- p entails that p and $\sim p$ cannot both be true. The answer, however, seems

to lie in Aristotle's implicit assumption of the Law of Contradiction in his characterization of truth and falsity, as we have seen. The argument for Excluded Middle in *Metaphysics* Γ.7. is the same as that here in *De interpretatione* 9. This seems to confirm that Aristotle is in the present passage arguing for the truth of Excluded Middle, given his understanding of truth, on the assumption of Bivalence. Hence, the interpretation which some copyist apparently thought necessary to bring out in the variant text makes the best sense of the passage. As to the second difficulty, if this variant is correct, then the argument does not seem to derive Excluded Middle from Bivalence, for it winds up with the same formulation that it started with. Indeed, the argument does not seem to have led anywhere: we start out by denying of future singular propositions that it is necessary that the affirmation or negation be true or false (18a28); now we conclude that if we assume for future propositions that every affirmation or negation is true or false (18a34), then it follows for such propositions that it is necessary that every affirmation or negation is true or false (18b4). The only way out of this quandry would be to so interpret the conclusion: every affirmation (or negation) is necessarily true or necessarily false. (A couple of manuscripts do read ἡ τὴν κατάφασιν ἢ τὴν ἀπόφασιν). This should appeal to proponents of the non-standard interpretation, but it is exegetically painful and rests on an unwarranted inference, as we shall see in a moment. The Minio-Paluello text makes much better sense of the train of reasoning in the passage: assuming Bivalence and given the definitions of truth, it follows for an *antiphrasis* of future singular propositions that necessarily the affirmation or negation is true, for both cannot be true together.

What is the necessity that Aristotle in this passage speaks of? Although it appears that he is for the most part speaking of the logical necessity of the Law of Excluded Middle, there is also the necessity which comes out most clearly in his example of the white thing. Here he speaks not of the necessity attaching to $(p \vee \neg p)$, but of the necessity of a true proposition's correspondence with reality. Frede has called this "relative semantic necessity."⁸⁰ It is the necessity that characterizes the correspondence relationship between a proposition and reality as the proposition describes it. Aristotle is saying that when a proposition is true or false, then necessarily the things described in the proposition (*die Sachverhalte*) must be so. Even interpreters of the second camp seem for the most part to recognize this: Aristotle is not inferring, as the non-standard interpretation would require, that because a proposition is true, it is necessarily true (in some temporal or causal sense of necessity); rather he is maintaining that necessarily if a proposition is true, then reality is such as the proposition states it is. Given this relative semantic necessity, a

proposition and its contradictory cannot both be true, for otherwise opposites would then obtain in reality, which would violate the Law of Contradiction. From this it follows that if every proposition is either true or false, then necessarily either every proposition or its contradictory is true.

2. Therefore, the truth of one disjunct entails fatalism

That leads us on to the first fatalistic difficulty (18b5-9), which follows therefrom. The separation of II.A.1 from II.A.2 is marked by the “so” (ὥστε) concluding the first section and the “it follows” (ἄρα) opening the second. This latter conjunction has a more subjective tone than οὖν, and is consistent with Aristotle’s arguing *ex hypothesi*: “if this is so....” His argument is that if in every *antiphrasis* one of the propositions is true, then necessarily reality is such as that true proposition says it is. So, to use our own example, if it is true that “Aristotle will write tomorrow”, then necessarily Aristotle will write tomorrow. The semantic relationship between a true proposition and reality is such that the two *must* correspond, so that if the future singular proposition *p* is true then the described state of affairs *S* must eventuate—otherwise *p* is not after all true. The conclusion is that everything therefore happens necessarily (ἐξ ἀνάγκης and nothing occurs by chance (οὔτε ἀπὸ τύχης οὔθ’ ὁπότερ’ ἔτυχεν).


This latter phrase has generated some interpretive difficulty. Anscombe takes it to mean “by chance or as the case may be.”⁸¹ Strang perceives a flexibility of meaning:

The expression ὁπότερ’ ἔτυχε occurs nine times in chapter ix, sometimes substantivally, *e.g.* as τὸ ὁπότερ’ ἔτυχε, and sometimes functioning adverbially like ἀπὸ τύχης and ἐξ ἀνάγκης; also it is sometimes used in a wide sense as the opposite of necessity, covering the whole probability scale like τύχη and sometimes in a restricted sense as a special case of τύχη, meaning ‘the equiprobable’ or ‘what is as likely as not’. Depending on context, then, it will mean one of the following: *the contingent, contingently, what is as likely as not, either way indifferently*.⁸²

Ackrill, on the other hand, appealing to 18b8; 19a19-20, 38, contends that ὁπότερ’ ἔτυχε applies only to contingent events which do not happen for the most part.⁸³ Aristotle distinguished between events that happen always and necessarily (ἐξ ἀνάγκης καὶ ἀεὶ), for the most part (ὡς ἐπὶ πολὺ), and by chance (ἀπὸ τύχης).⁸⁴ Only events that happen by chance are covered by the phrase ὁπότερ’ ἔτυχε. Ackrill observes that these distinctions are irrelevant to the argument of the chapter, since the fatalist is arguing on purely logical grounds and not on the basis of universal causation. The fatalist wants to remove all contingency, not just that of

chance events. White, however, seizes precisely on this distinction to contend that for Aristotle fatalism is identical with causal determinism and that the fatalist's argument is designed only to remove chance events.⁸⁵ Since the only true future singular propositions concern causally determinate states of affairs, if future singular propositions are without qualification true, they must all describe causally determinate states of affairs—hence, nothing happens as chance has it.

Now as we have seen, the difference between things that happen necessarily and always, for the most part, or by chance is for Aristotle an important one. It seems clear that what happens ἀπὸ τύχης is identical with that which occurs κατὰ συμβεβηκός. This tripartite distinction⁸⁶ seems to be clearly reflected in this chapter, especially in 19a7-22. There he contrasts things that are always (ἀεὶ) and of necessity (ἐξ ἀνάγκης) with those which are either as chance has it (ὁπότερ' ἔτυχε) or for the most part (ὥς ἐπὶ τὸ πολὺ). We have seen that, in contrast to what happens for the most part, what happens accidentally or by chance cannot be the object of science because its behavior is entirely un-lawlike. This seems to be alluded to in 18b9: that which chances to be is not, nor will be, more one way rather than another.⁸⁷ This suggests that Aristotle is here arguing that if future singular propositions are true, then everything must occur necessarily or for the most part, and there are no accidental events. This would seem to support White's interpretation (leaving aside for the moment the nature of the necessity here involved). Such a conclusion, however, cannot do justice to the chapter as a whole. We have seen that Aristotle implies that future singular propositions are true only in the cases of events that occur always and necessarily in a cyclical process and that even *Metaphysics* E.3., to which White appeals, can be harmonized with this outlook. Hence, propositions about events in rectilinear series cannot be true or false. This same perspective finds expression in our chapter in 19a7-22. Aristotle states that the possibilities of being and not being are both open to all events which are not always and of necessity, whether they be as chance has it or for the most part. Thus, causally determined events not in a cyclical series are squarely in the realm of the contingent. This is repeated in 19a36: for things that are not always so, the possibility of statements about them being one way rather than another is open. For Aristotle, then, the situation appears to be:

Necessity	Contingency	
what is always so		
	what is for the most part so	what is sporadically so

White's interpretation is therefore untenable, for Aristotle does not equate causal determinism with necessity. Moreover, if our analysis has been correct, then Ackrill is certainly to the point in emphasizing that the fatalist's reasoning depends wholly on logical considerations, not causal. The relevant necessity here is that characterizing the semantic relationship between propositions and corresponding reality. Since the state of affairs *must* correspond to the true future singular proposition, the possibility of the event's equally happening or not happening is illusory. Frede explains,

The relative necessity which results from the truth of statements (*Sachverhalte*) is the same for all stages of time: if a statement *p* is true, then the things described by that statement must *de facto*—but not out of necessity—exist (*feststehen*). With things in the present and past this necessity occasions no further problem because the things do in fact exist; by contrast, with things in the future the contingency is nullified through the anticipation (*Vorwegnahme*) of the existence (even when merely conceived) of one of the two possibilities. But if a future thing described by a statement is not contingent, it is thus necessary, that is, the difference between relative and absolute necessity is erased.⁸⁸

The argument, then, proceeds from the antecedent truth of a future singular proposition to the necessity of the occurrence of the events described by that proposition. Now this argument, as Ackrill and Frede note, applies to all future events, whether they happen for the most part or by chance. Aristotle realizes this himself and cannot therefore be arguing in II.A.2 that if everything happens of necessity then *merely* chance events are eliminated. Rather he is probably focusing on them because they are the most striking instances of contingent events.⁸⁹ Events that happen for the most part are associated with events that happen always (for example, *Physics* 2.5.196b10-17), so that the fatalistic argument appears bolder if it removes the most noticeably contingent events in the world. Finally, Strang seems to be correct that *ὅπότῃ* *ἔτυχε* does have some latitude of meaning, for although Aristotle uses it in its strict sense at 18b5; 19a19, 20, he also seems to use it as a catch-all phrase for contingency at 19a34 (cf. 18b15-16).

3. And the past truth of one disjunct entails fatalism

The word “again” (*ἔτι*) marks the transition to the second fatalistic difficulty. The only significant difference between this argument and the foregoing is that the future event is now said to be present and the future singular proposition is pushed back into the past. Thus Aristotle returns to his example of the white thing and asserts that if something is white

now, then it has always been true to say of it “It will be white” (ἔσται λευκόν). But if this proposition was always true, then what it states cannot fail to eventuate (οὐχ οἷον τε ... μὴ ἔσεσθαι). Therefore, it is impossible that it will not happen (ἀδύνατον μὴ γενέσθαι). Therefore, it is necessary that it will happen (ἀνάγκη γενέσθαι). Is this the same argument as before, or does the pastness in some way alter the reasoning?

Malcolm Lowe reports that it is recognized today that Aristotle considers two distinct arguments for fatalism: the first based on the claim that if two people make contradictory statements about a future singular, one of them must be speaking the truth, and the second based on the claim that if it was always true to say that what eventually happens would happen, then one could not have said so truly without its happening.⁹⁰ Lowe is, however, entirely dependent upon Hintikka for this interpretation of the second argument, an interpretation which we have found to be without sufficient basis. Apart from that, Lowe seems to misunderstand the structure of Aristotle’s argument, for the illustration concerning the two persons and the antiphrasis is the key to II.A.1, the derivation of Excluded Middle; II.A.2, the first argument for fatalism, begins at 18b5 and is based on the semantic relation between a true proposition and reality. Aristotle does mention the illustration parenthetically in the first argument, but in the elaboration of the second argument in 18b33-5 the same illustration also appears. Aristotle adds that the people’s utterances are not needed to make the argument work—but this applies to their role not only in the second argument but in the first argument as well. In both arguments, then, the problem seems to hinge on the question of antecedent truth.

A popularly held interpretation of this chapter, defended by Steven Cahn, maintains that Aristotle presents two distinct arguments for fatalism, the first based on the truth of a future-tense proposition and the second based on the necessity of a past-tense proposition.⁹¹ By shifting the future-tense proposition into the past, it is said, Aristotle has fundamentally altered the argument. For now the reason that the event cannot fail to come to pass is that the proposition’s truth is a fact of past reality, and, as we have seen, the past cannot be changed. So the necessity of the event stems not merely from the truth of the propositions, but from the unalterability of the past truth of the proposition. One must, however, wonder if this interpretation is not reading back into Aristotle a similar argument, oft discussed by medieval theologians, concerning the pastness of God’s foreknowledge of an event.⁹² In that argument, there was a reality in the past that could not be changed, namely, God’s act of knowledge. But in Aristotle’s argument it is not clear that there is anything to which the unalterability of the past may attach itself. Aristo-

tle emphasizes that the event of uttering the future-tense proposition is superfluous to the argument. So what is it in the past that is now unalterable and entails the occurrence of the future event? He does speak of “how the actual things are” (οὕτως ἔχει τὰ πράγματα) and “the state of things” (οὕτως εἶχεν),⁹³ but still gives no indication that because “the facts of the matter” are in the past, they are therefore unalterable and necessary. The point seems much more to be that it was antecedently *true* that x would eventuate, and therefore, given the correspondence between a true proposition and reality, x must eventuate. “For what anyone has truly said would be the case cannot not happen; and of what happens it was always true to say that it would be the case.”⁹⁴ Moreover, it does not seem that the unalterability of the past really speaks to the heart of issue. For, we might ask, why could it not be the case that a proposition was always true of some event, but then at some point changed in truth value? In this case, the past has not been altered; the proposition was always true prior to t_n and false thereafter. The real issue therefore appears to be, not the unalterability of the past, but why the truth of a proposition at some point in the past entails its truth at all points in the past. Here appeal cannot be made to the incapacity of eternally existing things to change, for this is inapplicable to statements, as we have seen. Rather the answer would seem to be that, given the semantic relation, a future singular proposition antecedently true at one point must be antecedently true at all points because its truth necessitates the eventuation of the events described. Otherwise, the state of affairs would be in the realm of μελλόντα, and the proposition that it is going to be could change in truth value. But given that the event is really future, is one of the ἐσόμενα, then the future singular proposition about it is always true prior to its occurrence. So once again, the issue is the semantic relation between a proposition and its corresponding state of affairs. It does not appear that the reasoning appeals to the necessity of the past in any essential way.

As I mentioned earlier, McKim provides yet another interpretation of the second fatalistic difficulty, namely as an argument from decideability.⁹⁵ Against the non-standard interpretation of the argument, he notes that “necessary” here cannot be construed in terms of temporal necessity. McKim also maintains that 18b9-10 is true simply in virtue of the semantic definition of truth. But he finds puzzling the necessity of the event predicted. To say the event is necessary could only mean that it is necessary relative to some state of the universe, in the sense that the latter is sufficient for the former. If an event were necessary in this sense, then the truth value of a proposition stating that it would occur would be decideable in principle as soon as the event’s sufficient conditions were

realized. Hence, if p is decideable, then S is necessary. Now in calling a statement true, one presupposes that the conditions which must obtain for the statement to be true do obtain, and one implies he has grounds for believing that the statement's truth value is decideable. Hence, it is true that if p was *rightly* said to be true, then it is necessary that S obtain. So Aristotle's argument must be contrued as maintaining that if S obtains, then it could have been rightly asserted that p —a conclusion McKim rejects. Aristotle fails to discern the difference between " p (said earlier) was true" and " p was rightly said earlier to be true." Now I must confess that such reasoning seems to me to be very far from the mind of Aristotle. In his mind, the antecedent *truth* of a proposition guaranteed its correspondence with reality and, hence, the obtaining of the corresponding state of affairs. McKim seems to have missed this semantic necessity and assimilated it to what appears to be causal necessity. Aristotle's own view did appear to be that only in the case of cyclically determined events could one state truly a future singular proposition; but here Aristotle is arguing *ex hypothesi*: assuming all future singular propositions are or have been true, it is necessary for the corresponding states of affairs to be realized. Perhaps McKim's confusion is caused by Aristotle's use of "to say"; but as Frede notes, ἀληθὲς εἰπεῖν is often used by Aristotle as a synonym for ἀληθὲς.⁹⁶ Indeed, we have seen that he acknowledges that the actual utterance of the sentences is superfluous: what makes the difference is whether the sentence is true. Here in the second argument, Aristotle contends that if it is the case that x is so, then it was true earlier that " x will be so", and so forth. Therefore, I do not see that the question of decideability plays any role in the reasoning.

Strang sees the passage as an attempt to refute possible objections.⁹⁷ One objection would be that future singular propositions may not be true or false, to which Aristotle replies that if it is true now to say "It is white" then it must have been true to say earlier "It will be white." A second possible objection is that the truth of a statement does not entail the necessity of the event whose occurrence it asserts, to which Aristotle replies in 18b11-15. But Strang's interpretation of the first reply, while plausible in itself, assumes that Aristotle is not here arguing on the presupposition that future singular propositions are true or false, as we have seen to be the most plausible interpretation of his reasoning thus far. Besides, Aristotle does not reason from the present truth of "It is white" to the past truth of "It will be white." He reasons from the fact or state of affairs of the thing's being white to the past truth of a proposition corresponding to that fact. Then he moves from the truth of that proposition via the semantic relation to the necessity of the event in ques-

tion. Thus, Strang is correct on his second point, but he fails to see its connection with the first. He divides the organic unity of the argument into two separate objections and replies. And as McKim urged, it is difficult to see what sense can be made of the necessity of the event on the non-standard interpretation; it seems clearly to be the necessity of the correspondence relation between a true proposition and reality. The non-standard interpretation encounters real difficulty in this passage because no ambiguity concerning the necessity of the future event exists, since the discussion concerns a single, true proposition, not an *antiphrasis*.

The most plausible account of this second fatalistic argument, therefore, is that it is essentially a recast of the first, based on the necessity of the semantic relation. Aristotle's recasting it in the past tense is a heuristic device, designed to bring home to the reader in a more powerful way the fatalism entailed by antecedent truth. And, I think we must admit, the device does this very well: it is one thing to be told that it is now true that, say, I shall be killed by a robber tomorrow night; but how much more do we feel the clammy hand of necessity laid upon us if we are told that it has been true *from all eternity* that tomorrow night I shall be killed by a robber! Thus, the second argument is essentially the same as the first, the argument from antecedent truth, but cast in the form of a more powerful illustration.

4. Of a contradictory pair of future contingent singular propositions, both cannot be untrue

Having presented his two fatalistic difficulties resulting from the antecedent truth of future singular propositions, Aristotle argues in II.A.4 that of a contradictory pair of future singular propositions, both cannot be untrue (18b17-25). Here Aristotle's opening sentence is definitely ambiguous (hence, my unfelicitous term "untrue") and has given rise to two sharply differing interpretations. He states that in an *antiphrasis* of future singular propositions, it is not possible to say, "Neither one nor the other is true" (οὐδ' ὥς οὐδέτερόν γε ἀληθές). Adherents of the non-standard interpretation have fastened on this phrase as proof that Aristotle himself rejected the standard modern interpretation, namely, that neither proposition in the *antiphrasis* is true because future contingent propositions are neither true nor false.⁹⁸ He states explicitly that such a situation is impossible. On the other hand, the standard modern interpretation takes Aristotle to mean that it is impossible that both of the members of the *antiphrasis* be *false*. Just as he argued earlier that both cannot be the case, so here he blocks the alternative that both are not the case; hence, the remainder of the sentence "...that it neither will nor will

not be so.” Just as it is impossible that both be true, so it is impossible that neither be true.

Now obviously either interpretation can make its peace with the phrase taken in isolation. The question is, which understanding makes the most sense in the context? Proponents of the non-standard interpretation generally have little to say about this. According to Strang,⁹⁹ the objector proposes to introduce a third truth value, so that neither p nor $\sim p$ is true. The fatalist’s first response to this is to claim that this latter statement entails that p and $\sim p$ are both false. But this is a plain howler, for all that follows is that neither p nor $\sim p$ is false. But the fatalist’s second response is more successful. If the objector holds that neither of the future-tense propositions is true, then when tomorrow comes neither of the similar present-tense propositions is true. Nothing will be happening, and hence, nothing will be happening $\delta\acute{\pi}\acute{o}\tau\epsilon\rho$ $\acute{\epsilon}\tau\upsilon\chi\epsilon$. Therefore, the fatalist will be forced to say that a proposition can become true after not being true. Strang then brings his own philosophical objections. Now Strang seems to blur the notions of truth value gaps and of trivalent truth values in his discussion, but that may be overlooked. On his account the fatalist’s first reply simply makes no sense: the objector says, neither proposition is true, to which the fatalist responds, then both propositions are false. Since Aristotle is here admittedly siding with the fatalists, he, on this account, does not even understand the objection he himself has formulated! Moreover, the fatalist does not, in fact, reply as Strang asserts. He does not argue for an entailment relation between “neither p nor $\sim p$ is true” and “ p and $\sim p$ are both false.” He rather assumes that one of the contradictories is false and asserts that on this view the other must then not be true. This reply, on Strang’s view, makes even less sense. As for the second response, it does not seem that Aristotle is arguing from the truth of future-tense propositions to the future truth of present-tense propositions. For then the example of the white, large thing makes no sense, since the phrase “both have to hold of it” would indicate the truth of a present-tense proposition. But then the reasoning is tautologous: if it is true that “Something is white and large,” then it is true that “Something is white and large.” It is more sensible to understand Aristotle to be speaking again of the correspondence between a true proposition and reality. If a proposition—present- or future-tense—is true, then it must correspond to reality. So Aristotle’s concern is not that tomorrow, the present-tense versions of the propositions will not be true. It is not at all apparent that Aristotle thought it absurd that present-tense propositions become true—Strang imports his own objections at this point. Nor is the argument against contingency based on the fact that nothing is happening, for then it would be equally true that nothing

happens necessarily. Rather Aristotle wants to claim that what the propositions describe *must* occur. It seems to me, therefore, that Strang's reading of this passage fails to make good sense.

The standard modern interpretation, on the other hand, makes good sense of the context. Aristotle gives two supporting arguments why it is impossible to say that it neither will be nor will not be so. The first of these seems to make pretty clear what his meaning is: on this view (namely, that neither is true) even though the affirmation is false, the negation is not true; and even though the negation is false, the affirmation is not true. Aristotle thought this self-evidently absurd. It seems apparent that he is talking about the propositions' being false, not simply "untrue" in the sense of lacking a truth-value. For on the non-standard interpretation he must be saying that for $(p \vee \sim p)$ it is impossible to interpret this in terms of the truth values $(I \vee I)$, where I stands for "indeterminate" (either in the sense of value gaps or a third value), that is, neither is true. But Aristotle states clearly that what he means is that one is false and the other is not true. At best, then, on the nonstandard interpretation this would be $(F \vee I)$ or $(I \vee F)$, which does not make sense in this context, for if p is false, then $\sim p$ must be true and *vice versa*. Oddly enough, this unintelligible situation still accords with Aristotle's language, for neither is true! But what the non-standard interpretation really takes Aristotle to mean is that neither is true (nor false). For being false displays truth-value as much as being true and the option Aristotle purportedly wants to block is that neither proposition has a truth value. But I cannot see how he could more clearly state that at least one member of the *antiphrasis* has a truth value: It is false. More than that, this also shows that when he says the other proposition is "not true" he must, on pain of unintelligibility, mean "not true either", that is, false. Hence, when in the opening sentence he asserts that it is impossible that neither is true, he means it is impossible that both are false. This is confirmed by the second supporting argument, for he does not argue, as one would expect on the non-standard interpretation, that since the state of affairs S obtains it must have been true earlier that p (in the future tense). Rather he argues that if p , then necessarily the state of affairs S described by p will be actualized. In other words, he does not try to prove that future singular propositions must be true or false; his argument is directed at the hypothesis that both are false.

Such a reading makes good sense of the overall structure of Aristotle's reasoning. When in II.A.1 he argued that in an *antiphrasis* both statements cannot be the true, the unanswered question was, why could not both be false? Ackrill suggests that the immediate contrast with indefinite sentences, both of which could be true, causes Aristotle to focus on the

impossibility of that situation *vis á vis* future singular propositions; or it may be that Aristotle assumes that his proof that both cannot be true automatically holds as well for their both not being false.¹⁰⁰ But, as Ackrill agrees, 18b17-25 covers explicitly this option. Here Aristotle blocks any last objection that seeks to avoid the inference from the Principle of Bivalence to the Law of Excluded Middle.

As for the two supporting arguments themselves, the first simply restates in other words the objection itself. Aristotle regards it as self-evidently ridiculous, for it violates his understanding of truth, which as we have seen, is governed by the Law of Contradiction. For p and $\neg p$ can both be false only if not- S and not-(not- S) both obtain in reality, which involves a contradiction in being. As for the second argument, Aristotle maintains that even if such an absurd situation could obtain, fatalism still follows. He takes the two propositions of the *antiphrasis* as two conjuncts on the analogy with the properties white and large. If it is true to say of something "It will be white and large tomorrow", then tomorrow that will have to be the case. This is the necessity of the semantic relation once again. Analogously, if it is false to say "There will be a sea battle tomorrow" and it is false to say "There will not be a sea battle tomorrow", then necessarily, tomorrow there will not be a sea battle and there will not not-be a sea battle, since the semantic relation necessitates that both propositions fail to correspond to reality. Hence, even in this absurd situation, the truth value of future singular propositions entails fatalism. This argument brings out clearly that it is not simply the *truth* of such propositions that has fatalistic consequences; rather it is their possession of a bivalent truth value at all. An antecedently false proposition entails fatalism as much as an antecedently true proposition. Thus, it seems to me that in II.A.4 the context makes the best sense if we understand Aristotle to be arguing that in an *antiphrasis* of future singular propositions, it is impossible that both be false.

B. Absurdity of Fatalism

1. Fatalism implies everything happens of necessity

The case for fatalism is now complete, and in II.B (18b26-19a22) he discusses the obvious absurdity of fatalism. First, he draws out the consequences of fatalism (18b26-19a6). He begins by recapitulating the thesis and the conclusion which follows its assumption: that necessarily for every affirmation and negation one of the contradictories be true and the other false. I have already argued that the thesis is now stated in terms of Excluded Middle, probably since he has argued for fatalism using

Excluded Middle after deriving it from Bivalence. The assumption of this thesis means that everything happens of necessity, which in turn implies that deliberation and action are futile. He implies that what will happen will happen regardless of what we do—a conclusion to which a fatalist need not commit himself.¹⁰¹ He then recapitulates his fundamental argument from antecedent truth: if the “facts of the matter” were such that it was true prior to an event’s occurrence that that event would occur, then necessarily that event will occur. For what is true cannot fail to be the case.

Although we have already discussed the critical interpretive issues in the passage, a word might be said concerning the temporality of the truth of sentences in Aristotle’s argument. We have seen that Hintikka’s emphasis on a sentence’s being true in the whole of time places an unwarranted weight on this phrase. On the other hand, Kneale has argued that Aristotle’s argument depends crucially on a sentence’s being true *now*, at a particular point:

...he thinks of the predicates ‘true’ and ‘false’ as applicable to something (probably a sentence) at a certain time. What puzzles him is the fact that we can say, ‘It is *now* true that there will be a naval battle tomorrow’... We mislead ourselves, however, when we speak, as Aristotle does, of its being true *now* that there will be a naval battle tomorrow, for we thereby induce ourselves to suppose that *this* will not be true tomorrow evening, when the battle is over, but something else will, i.e. ‘There has been a naval battle today.’¹⁰²

Frede, however, disagrees, observing that Aristotle never speaks of a statement’s being “true now.”¹⁰³ She thinks Aristotle does not mean that one could at every point of time prior to the event say that it is “now” true that the event would happen, as much as he means that the fatalistic argument is always cogent if Bivalence holds for all predictions. He wants to emphasize the independence of the cogency of the argument from any particular point in time. Now with this last statement one may certainly agree, but it does not follow that Aristotle wanted to make the argument independent of any point in time whatsoever. His illustrations surely suggest that when a person 10,000 years ago uttered the sentence *p*, *p* was then true. Moreover, it also seems to be correct that for Aristotle truth value attaches to sentences, which change in truth value at different times.¹⁰⁴ On the other hand, it is not clear that this lies at the heart of Aristotle’s argument, as Kneale suggests. For Aristotle could just as easily have maintained that truth attaches to tenseless propositions complete with definite temporal indexicals and still have argued for fatalism on the basis of antecedent truth. For as Kneale herself elsewhere admits, when we say such propositions are “timelessly” true, what is

meant is actually “sempiternally” true, that is, true at all times.¹⁰⁵ In this case, the proposition “A sea battle *occurs* on May 4, 343 B. C.” is true at all times prior to that date. Therefore, the state of affairs described by the antecedently true proposition must eventually obtain; otherwise the proposition was not after all true. Hence, I do not see that Aristotle’s temporal view of truth bearers plays any essential role in the argument. The crucial issue is that of antecedent truth.

2. But this is obviously not the case

That leads us to section II.B.2 (19a7-22), in which Aristotle asserts the folly of fatalism. The opening phrase Εἰ δὴ ταῦτα ἀδύνατα is apparently the protasis of which φανερόν ἔρα (19a18) begins the apodosis. Since the ταῦτα refers back to the absurdities of the foregoing section, the conclusion in the apodosis is closely tied to that previous section. The argument seems to be: if these absurdities are impossible (and they are), then clearly not everything happens of necessity: some happen by chance and others only for the most part. Therefore, by implication, the thesis from which it followed that everything happens of necessity must be false.

Both consequences of fatalism—that everything happens of necessity and that deliberation and action are futile—are, Aristotle contends, patently false. He focuses his attention on whether everything happens of necessity. As explained earlier, Aristotle here speaks of three kinds of things: things that happen always and necessarily, things that happen for the most part, and things that happen sporadically by chance. For the things which are not always, it is contingent (ἐνδέχεται) which of the two contradictory possibilities will be realized. Clearly Aristotle is not restricting contingency merely to chance events. The example of the coat’s being cut up or worn out occasions some difficulty. For Aristotle held that every genuine possibility, given enough time, must be actualized.¹⁰⁶ But there the possibilities are mutually exclusive; so how can both be genuinely possible when only one can be realized? Here Hintikka’s answer seems the best: Aristotle’s principle that every possibility will be actualized applies to species, not particulars.¹⁰⁷ Thus, for example, it is possible for this chunk of wood to be burned up, even though it will in fact rot, because wood as a species is combustible, that is, is sometimes burned up. If wood never in infinite time burned up, then to say it is possible for wood to burn would be vacuous, for there is no difference in that case from saying that it is impossible for wood to burn. But given that wood sometimes burns, it is possible that this piece of wood burned up, for combustibility belongs to wood as a species. But that need not imply that this piece will burn up, for it is also possible for it to rot, which

it will in fact do. Hence, real contingency exists in the universe; not everything happens of necessity.

The point of the argument is not that some events are causally indeterminate,¹⁰⁸ for that would be irrelevant to fatalism—even an uncaused event must happen if a prediction of it is true. Rather the thrust of argument seems to be that there are with regard to things that will be real possibilities—both sides of the *antiphrasis* are genuinely open to realization. But if one member of the *antiphrasis* is antecedently true, then the relevant states of affairs must be realized: it is impossible that reality should come to correspond to the other member of the contradictory pair. Therefore, if one member is antecedently true, then real possibilities are not open with regard to future things: exactly that state of affairs will become real which is described by the antecedently true proposition.

Aristotle's conclusion to this section is difficult. He says plainly that not everything happens of necessity. Then he contrasts the cases in which things happen by chance (ὁπότ' ἔτυχε) and for the most part (ὥς ἐπὶ τὸ πολὺ). In the first case, οὐδὲν μᾶλλον ἢ ἡ κατάφασις ἢ ἡ ἀπόφασις ἀληθής. The adverb “μᾶλλον” means “more, more strongly, rather”—does Aristotle mean to say that neither the affirmation nor the negation is *more* true than the other, or that neither is true *rather* than the other? In either case, the statement sits ill with the non-standard interpretation, for it is apparent that in the *antiphrasis*, it is not the case that one member is true and the other false. Interpreters of this camp must read into this statement implicit qualifiers that alter its *prima facie* meaning. For example, Hintikka contends that by μᾶλλον ἀληθής what is meant is simply “happens *more often* in one way rather than the other.”¹⁰⁹ Accordingly, with regard to events that happen by chance, neither the affirmation nor the negation is true more often than the other. Hence, in 19a36-9 Aristotle states that one member of the *antiphrasis* is necessarily true and the other false; but that one is often merely “truer” than the other; that is, considered separately, one is true more often than the other. Rescher, on the other hand, takes the ἐξ ἀνάγκης of 19a18 to be still operative at 19a20, so that the meaning is that the affirmation is not true rather than the negation by necessity.¹¹⁰ The underlying contrast is not ($p \vee \sim p$) but ($\Box p \vee \Box \sim p$). Rescher's interpretation, however, simply has nothing in this section to speak for it, either grammatically or contextually. Hintikka's interpretation, too, lacks supports in the immediate context, and it is doubtful whether the supplementary texts he adduces (*Prior Analytics* 1.13; *Physics* 2.5; *Metaphysics* E.2) alter the *prima facie* meaning of the passage. For these texts speak chiefly of how that which occurs by chance does not incline one way more than the other, but Aristotle never speaks of statements' being true more often than their contradictories. Certainly

chance events happen infrequently, while events that happen for the most part occur frequently. But there is no mention that a sentence about a chance event is true just as often as its contradictory. Discussion of 19a36-9 may be reserved for later, but we may observe in passing that Aristotle does not explicitly state there that one member of the *antiphrasis* is necessarily true and the other false, nor that considered separately one is often “truer” than the other. Hintikka’s interpretation is of a piece with his belief that Aristotle’s primary concern is with omnitemporal truth, and insofar as that reading proves unlikely, so does his interpretation of this statement.

Frede proposes yet another view, that Aristotle is stating that neither the affirmation nor negation is more probably true than the other.¹¹¹ She appeals to the description of the *ὁπότερ’ ἔτυχεν* in 18b8-9 as *οὐδὲν μᾶλλον οὕτως ἢ μὴ οὕτως*. There the chance event has no greater inclination to either of the two possibilities. Accordingly, neither statement about it is more probably true than the other. This helps to explain 19a36-9: Aristotle there speaks of things that are *ὡς ἐπὶ τὸ πολὺ*, and while he grants that one member of an *antiphrasis* is more probably true than the other, he denies that either is already true or false. Once again, however, it seems that the commentator is reading things into the text on insufficient grounds. That Aristotle uses the adverb *μᾶλλον* to say that a chance event is no “more” one way than another hardly warrants the conclusion that when the word appears in this sentence with regard to affirmations and negations about chance events, the content of the comparisons is the same. Again, we defer our discussion of 19a36-9 until later, but we may note for now that there is no indication at all that in the conclusion Aristotle is talking about things that happen for the most part, so as to grant that propositions about them, as over against propositions about chance events, are more probably true than not, yet not already true.

Given that Aristotle’s characterization of truth and falsity allows of no degrees of truth, so as to permit talk of one sentence’s being “more true” than another¹¹², I therefore see no objection to taking the statement at face value: of the affirmation and the negation concerning a future chance event, neither is true. This is not only what the statement says but also accords with the argumentation as we have examined it up till now. If either the affirmation or negation were true, the event would happen of necessity; but the event obviously does not happen of necessity; *ergo*....

But what then does Aristotle mean by the second phrase, *τὰ δὲ μᾶλλον μὲν καὶ ὡς ἐπὶ τὸ πολὺ θάτερον, οὐ μὴν ἄλλ’ ἐνδέχεται γενέσθαι καὶ θάτερον, θάτερον δὲ μὴ*? As Frede notes, the statement in this case does not appear to refer to affirmations or negations, but to the things themselves.¹¹³ A

literal translation is impossible, but the sense is that some things happen for the most part one way rather than the other, but the possibility always remains for them to happen in the other way. Nothing is said here about the truth value of future propositions about such things. But the implication from the foregoing reasoning would be that such propositions would also be neither true nor false. For we have seen that if a future singular proposition is true, then what it describes happens of necessity. Since with events that happen one way for the most part, there remains the contingency for them not to occur that way, they do not happen of necessity and cannot be the object of true or false future singular propositions. Only events that occur necessarily, that is, in a recurrent everlasting series, can be the objects of future singular propositions which are antecedently true or false. The structure of Aristotle's argument and the context seem to imply, therefore, that what holds for propositions about chance events also holds for propositions about events that happen for the most part: neither the affirmation nor the negation is true rather than the other.

III. Resolution of Fatalistic Difficulties

We come finally to section III, the most vigorously disputed passage in the chapter. Here Aristotle proposes his resolution of the fatalistic difficulties (19a23-b4). Before proceeding to an analysis of the subsections, it might be well to say a word about the structure of section III. According to Hintikka, Aristotle makes the same point three times in this section, addressing himself to a slightly different version of the problem each time.¹¹⁴ In 19a23-7 he states what is true and false in the fatalistic arguments *à propos* an individual event; in 19a27-32 he repeats the same points for a pair of contradictory future events; and in 19a32-b4 he goes through the analysis again for an *antiphrasis* of future singular propositions. Hintikka then attempts to show the parallels between the analysis in each of the three subsections. First, Aristotle makes an assertion of necessity with regard to the *analysandum* (19a23, 28-9, 36-7); then he qualifies that necessity (19a24-5, 29, 38); finally, he may or may not add an additional non-parallel remark (19a25-6; 19a38-9). Hintikka's subdivision of this section into its three parts is helpful and, I think, generally acknowledged.¹¹⁵ I am somewhat more sceptical about the value of his parallels for the interpretation of the section, however, for they are rather general, incomplete, and at least in the third subsection a little forced.

Lowe claims that the structure of Aristotle's resolution of the difficulties has been misunderstood.¹¹⁶ In 19a23-7 Aristotle answers the

second fatalistic difficulty, while in 19a27-9 he answers the first. On this analysis 19a23 interrupts the second fatalistic difficulty at 18b13: “it could not not be so, or not be going to be so.—What is, necessarily is, when it is....”; 19a27 interrupts the first fatalistic difficulty at 18a37: “it is clearly necessary for one of them to be saying what is true—and concerning the contradiction: it is necessary for everything to be or not to be....” Now of course this analysis depends on there being two distinct fatalistic difficulties, which we have seen to be dubious. But in addition, Lowe’s purported points of interruption seem quite arbitrary, and there are any number of places where the refutation could be fitted into the fatalistic difficulty. For example, 19a23 could interrupt the first difficulty at 18b7, and 19a27 could apply to 18b36. The fact is, there is nothing in either passage that seems to be a distinct resolution of one particular difficulty. It is much more likely that Aristotle is speaking here in summary fashion, as Hintikka contends.

A. Necessity and Conditional Necessity

Let us therefore turn to III.A, necessity and conditional necessity (19a23-7). Here Aristotle speaks of a singular existent and says that when it is, it necessarily is, and when it is not, it necessarily is not. So far he seems to agree with the fatalist. But he adds, this is not the same as saying a thing is of necessity unconditionally. Not everything that is, unconditionally necessarily is, and the same holds for what is not. Now before we look at this difficult notion of necessity, let us ask ourselves what the *point* of distinction is. It seems to me that Aristotle is trying here to assert what he said before: there is real contingency in the universe. Not everything that exists exists necessarily, after the manner of the stars, the sun, and the seasons; but there are also chance events and events which happen for the most part. There are genuine, open possibilities in the universe, and the things that exist do not have to exist: things could have been different. Now this is an important assertion on his part and shows that self-consciously he is no fatalist. Nevertheless, there is a conditional necessity that characterizes things that exist when they exist. This necessity does not remove their absolute contingency, for it is consequent only upon their existence: *when* they exist, they exist necessarily. Hence, the fatalist’s repeated assertion that everything is or happens of necessity needs to be seriously qualified.

What then is this necessity that characterizes things when they exist? There are, it seems, two possibilities. The first is what has been called temporal necessity. This necessity characterizes things that have been actualized in the past and present. Once a thing exists, it is no longer

possible for it to exist other than as it does exist. By implication when a thing does not as yet exist, its existence is merely possible. It may or may not come to exist, but once it does, once it is actual, then it is necessarily. But of course, this necessity is conditional because it is open which possibilities will be actualized. Only once they are actualized are they temporally necessary.

The real strength of this interpretation of the notion of necessity here involved is Aristotle's use of *ὅταν*, "when." This seems to indicate Aristotle has temporal considerations in mind, and we know from other passages that he regarded the past as unalterable. A weakness of this interpretation, however, as we have seen, is that it is very difficult to characterize precisely this conception of necessity. For although one could read III.A as contrasting temporal, conditional necessity with unconditional, eternal, cyclical necessity, this understanding makes no sense at all in III.B. The necessity which there holds of the contradictory events taken together as a pair is clearly not temporal necessity. Nor can this be said to apply to III.C, where the necessity concerns contradictory statements. Hence, the straightforward statement in III.A that something is necessarily when it is must inevitably be qualified. Causal determinacy is usually introduced into the notion of necessity operative in III.B with regard to each individual member of the pair.¹¹⁷ These are not causally determined in advance to occur. Hence, a thing is said to be necessary either when it exists (or has existed) or is causally determined to exist. Hintikka, on the other hand, thinks the conditional necessity operative in III.A is necessity-at-a-time, while unconditional necessity is necessity-at-all-times. The word *ἀπλῶς* means "without qualification" and in Aristotle's usage indicates the absence of temporal qualifiers.¹¹⁸ Thus, what is unconditionally necessary is necessary at a certain time. Hence, when in III.B he states that it is not necessary that a sea battle take place tomorrow, he means that this statement lacks a definite temporal indexical and, since sea battles do not occur on every morrow, is therefore not necessary.

In addition to the confusion over what precisely this temporal necessity is, a second weakness of this interpretation is Aristotle's statement in 19a27-8 that "the same account" holds for contradictories as for the individual events. For it is notorious that on this reading the account is not the same at all. In III.A the necessity is temporally applied and contrasted to unconditional necessity. In III.B a modal fallacy is discussed. On this interpretation why Aristotle should call them the same account remains a great puzzle.

This understanding of the necessity in section III as tied to temporal considerations is not exclusive property of either interpretive camp.

Anscombe, Strang, Rescher, and others appeal to it to claim that for Aristotle future contingent singular propositions are not necessary in this sense, though they are true or false. Similarly, Hintikka argues that Aristotle regarded future singular propositions as true or false and as temporally necessary, but not as unqualifiedly necessary. Ackrill, on the other hand, believes temporal necessity supports the standard modern interpretation, since for Aristotle every proposition with a truth value also has a “necessity value”. Since future contingent singular propositions are not temporally (or causally) necessary, they are not true or false either. Waterlow holds that chapter 9 turns on two theses: (i) contingency belongs only to the future and (ii) contingency is consistent with antecedent truth, but not antecedent falsity—but she admits these are independent claims.

A second possible understanding of this notion of necessity is that it is the typical logical modal operator applied to statements. Thus, what 19a23 asserts is, “Necessarily, what is, is, when it is, and what is not, is not, when it is not.” Indeed, it might be very plausibly argued that this is the better translation of the Greek: *Τὸ μὲν οὖν εἶναι τὸ ὄν ὅταν ᾖ, καὶ τὸ μὴ ὄν μὴ εἶναι ὅταν μὴ ᾖ, ἀνάγκη*. Here the necessity seems very clearly to govern the sentence as a whole. Aristotle on this reading is saying that it is a logically necessary truth that what exists does exist when it exists. But that does not make the existence of the thing itself logically necessary. This insight could cut to the heart of the fatalistic difficulty. For the argument hinged on the necessity of the correspondence between a true proposition and the state of affairs in reality: if a proposition is true, then reality necessarily corresponds to it; hence everything happens of necessity. Aristotle replies, “No, it is necessary for something to be, when it is (or is going to be); but it is not necessary unconditionally that it is (or is going to be). Similarly for what is not.” Its necessity is conditional upon the fact that it is or will be. Given that the proposition asserting its existence is true, necessarily the things must come to exist. Nevertheless, its necessity is not unconditional, but rather is conditional upon the fact that it will exist. Aristotle’s commentator Alexander called this *ἀναγκαῖον ἐξ ὑποθέσεως*, and saw it as the solution to the fatalistic difficulty: “Necessarily, if there will be a sea fight tomorrow, then it will be tomorrow” presents no fatalistic problem. The real strength of this interpretation is not only that it cuts to the quick of the fatalistic difficulty, but that it now makes sense of Aristotle’s remark concerning III.B being the “same account.” For now they both are; namely, the exposure of a modal fallacy. C.J.F. Williams remarks,

‘The same account’ can indeed be given of the move from ‘What is the case, necessarily, when it is the case, necessarily is the case’ as can be given

of the move from ‘Necessarily one or the other is the case.’ The essential move in each case is fallacious and the fallacy is that of shifting the operator. Aristotle would be entitled to say that the same account could be given of each.¹¹⁹

On this view, the notion of necessity has nothing to do with temporal considerations.

But this view, too, has certain weaknesses. Aristotle does not say a thing is necessary *if* it is, but *when* it is.¹²⁰ Moreover, the remainder of section III becomes obtuse and almost superfluous if Aristotle is supposed to have had this insight. The discussion in III.C especially becomes unnecessarily complicated and the conclusion unrelated to this insight. For Aristotle never seems to capitalize on this fatal flaw in the fatalist’s reasoning. Furthermore, the chapter as a whole does not then make good sense, since the argumentation has been predicated on the assumption that granted a certain thesis the fatalistic reasoning is *correct*.

What then appears to be the most plausible account of the matter? The word *ὅταν* is not in itself decisive, for while it does mean “when,” it can also have the sense of “whenever” with a conditional force, so as to be nearly a synonym of *ἐάν* with reference to an indefinite future. Nor is *ἀπλῶς* decisive, for Aristotle also uses it to express logically conditional necessity.¹²¹ More help, however, is forthcoming from Aristotle’s explication of his position in 19a25-6: οὐ γὰρ ταύτόν ἐστι τὸ ὅν ἅπαν εἶναι ἐξ ἀνάγκης ὅτε ἔστιν, καὶ τὸ ἀπλῶς εἶναι ἐξ ἀνάγκης. Here he replaces *ὅταν* with *ὅτε* and *ἀνάγκη* with *ἐξ ἀνάγκης*. The adverb *ὅτε* with the present indicative refers to things that are now happening; even when it is rarely used with the future tense it has a sense opposed the indefinite future expressed by *ὅταν* with the subjunctive. This suggests that Aristotle’s concern here is genuinely temporal and not conditional. This impression is reinforced by his use of *ἐξ ἀνάγκης*, for this does not seem to function as a modal operator over the *dictum* as a whole, as did *ἀνάγκη* in 19a23-4.¹²² It seems that Aristotle is therefore talking about some sort of temporal necessity. But how to avoid the difficulties in defining that notion? It seems to me best to take Aristotle at face value here and not introduce further qualifications. That is to say, temporal necessity is the necessity that characterizes things that have been actualized and for which no possibility of being otherwise any longer exists. Future things do not have this sort of necessity, for they are merely potential, though they may be necessary in other ways. In III.A Aristotle contrasts this necessity with the absolute necessity of events in eternal cyclical processes. Everything is necessary when it exists (for the past cannot be changed), but not everything is unconditionally necessary, as are the motions of the heavenly bodies and the procession of the seasons or the

water cycle. This gives to ἀπλῶς a temporal sense, without falling into the implausibilities of Hintikka's interpretation. For Aristotle is speaking in 19a23-7 of *things*' being necessary, not the necessity of statements-at- t_0 or at all times.¹²³ In the end, Hintikka's interpretation not only gives an implausible rendering of the passage, but also makes a fatalist of Aristotle himself, since all p -at- t_0 are necessary. Now the temporal necessity I have defended in 19a23-7 seems to play no explicit role in III.B, C, and the attempt to discern it there is responsible for its near death by a thousand qualifications. In III.A Aristotle seeks to blunt the charge of the fatalist that everything is of necessity by rejoining that everything is of necessity only *when* it is, but not everything is of necessity absolutely. In III.B, C this notion of temporal necessity is left in the background, and he moves on to further distinctions. It must be admitted that this understanding cannot make as good sense of Aristotle's remark about the "same account" as does the interpretation based on a modal shift (but see below); however, it makes much better sense of section III and of the chapter as a whole.

B. Predicating Necessity Collectively and Distributively

In III.B Aristotle apparently discusses the predication of necessity collectively and distributively (19a27-32). In this section Aristotle appears to affirm the necessity of the Law of Excluded Middle while denying the necessity of either of the individual disjuncts. Proponents of the non-standard interpretation feel at home here, for Aristotle clearly states of a future event that necessarily it will or will not be, but one cannot say that it necessarily will be or necessarily will not be.¹²⁴ He returns to his example of the sea battle and asserts that it is necessary for there to be or not to be a sea battle tomorrow, but it is not necessary that there will be one nor necessary that there will not be one. Strang points out that 19a28, 30, 36 all show that Aristotle held to the necessity of $p \vee \sim p$; his apparent denials of this in 18a33-4, 19a19, 38, 39 must therefore be ambiguous denials of $\Box p \vee \Box \sim p$. The closest parallel to the present passage is *Categories* 12b39; 13a9, where Aristotle states of an animal that it is not necessary that it should see nor that it should be blind, but it is necessary that it should be in one state or the other. Hintikka urges against those who say that for Aristotle future singular propositions become true or false that in 19a28-9 he explicitly includes future-tense statements in his affirmation of $\Box(p \vee \sim p)$. Similarly, Spellman presses the point that Aristotle says that it is necessary, not that one of the contradictories *become* true, but that one or the other *be* true. Hence, Lowe concludes, Aristotle is denying, not the application of the Law of Excluded Middle to future

statements, but rather the inference from the necessity of Excluded Middle to the necessity of all events.

Some proponents of the first camp have tried to escape this conclusion by maintaining that Aristotle indeed thought that the Law of Excluded Middle holds for future contingent singular propositions, but also thought that those propositions are neither true nor false.¹²⁵ According to Kneale, Aristotle agreed that “Either there will be a naval battle tomorrow or there will not be a naval battle tomorrow,” but denied that it follows therefrom that “Either the statement ‘There will be naval battle tomorrow’ is true and its negation false or vice versa.” That does not mean interpreters of this persuasion agree with Aristotle on this score. Williams, for example, calls Aristotle’s solution a sheer contradiction, just the sort of situation Excluded Middle is supposed to preclude.

The fundamental problem with both of these views, however, is that they wreak havoc with the rest of the chapter. We have seen how time and again interpreters of the second camp, beginning from this section, have been forced into implausible eisegesis throughout the rest of chapter 9. Nor does the escape route of the first camp seem open, for Aristotle has argued that Excluded Middle entails fatalism, so that he could not affirm it while denying its fatalistic consequences.

A starting point for a more plausible interpretation of this passage would be the realization that Aristotle is not here discussing statements, but beings. He is talking about an event (or thing) and its opposite. He is not therefore asserting that for a future singular proposition p , $\Box(p \vee \sim p)$ but not $(\Box p \vee \Box \sim p)$. Rather he seems to be saying in the first place that something—whether present or future—and its opposite cannot both be or both not be. Hence, necessarily one or the other must be. This recalls Aristotle’s conception of being as governed by the Law of Contradiction. Although he uses the future tense ($\xi\sigma\epsilon\sigma\theta\alpha\iota$) here, one may take him to mean that when that time arrives, both the event and its opposite cannot be actual. One or the other must be actual. Now in a sense, this is an ontological Law of Excluded Middle; like the Law of Contradiction it is also primarily a law of being. But in applying it to future events, what it means is that when that future time is present, then one or the other must be actual. This comports with Aristotle’s argumentation in I.A.1, 4. His arguments that both members of an *antiphrasis* cannot be the case or not-be the case are independent of the assumption of Bivalence, which served only to foreclose appeal to a truth value gap or a third truth value. The point was that something and its opposite cannot both obtain or both not-obtain. I think his point may be similar here. Take the sea battle example, which he takes up again from I.A.4: it is absurd that tomorrow at sea a battle be both taking place and not taking place or that it be both

not-taking place and not not-taking place. Come tomorrow, a battle at sea must either be going on or not. In this sense, it is the case that either the event or its opposite obtains. It is most interesting that even in *Categories* 10.13a3-14, to which Strang and Hintikka appeal, there is a suggestion of this:

For it is not necessary for one or the other of them always to belong to a thing capable of receiving them, since if it is not yet natural for something to have sight it is not said either to be blind or to have sight....For it is necessary at some time for one or the other of them to belong to everything capable of receiving them. For when once it is natural for something to have sight then it will be said either to be blind or to have sight—not definitively one or the other of these but as chance has it, since it is not necessary either for it to be blind or for it to have sight, but as chance has it.¹²⁶

Here we seem to have a good example of a temporal restriction upon the Law of Excluded Middle: only when the point arrives at which the animal is sufficiently mature that it should be seeing is it, necessarily, either seeing or blind. Before that point, such an antithesis simply fails to apply.

With regard to future contingents, when the time of the event arrives, then, necessarily, either the event or its opposite must eventuate. Prior to that, however, the Law of Excluded Middle fails to apply to future contingent singular propositions about those events.¹²⁷ At least this is the case if we take the Law to mean that in an *antiphrasis* of such propositions one must be true and the other false. For the Law may be stated in a version which does seem to apply. For what we call the “Law of Excluded Middle” can be variously formulated, and it could be that Aristotle rejects one version while adhering to another *vis à vis* future contingent singular propositions. The Law of Excluded Middle can be construed as:¹²⁸

1. $\alpha \vee \sim \alpha$ is to be included among the tautologies of a logical system
2. The Principle of Bivalence, to the effect that a proposition must be true or false
3. Of a proposition and its contradictory, at least one must be true (given the Law of Contradiction, exactly one)
4. A proposition cannot be true and its denial fail to be false, or its denial false and it fail to be true
5. Every proposition either takes a given truth value or it does not.

Now some of these versions of Excluded Middle are compatible with a denial of Bivalence. For example (1) could apply to certain many-valued systems; (2), however, could not be maintained in any such system. Many systems could incorporate (3), in which case if one interpreted $p \vee \sim p$ as $I \vee ?$, the $?$ would have to be true. Version (4) can be readily maintained, but in this case the denial of I must also be I . The

fifth version applies to virtually all systems, whether they be multi-valent or contain truth gaps. So although the Principle of Bivalence must be given up in order to construct a many-valued logic, certain versions of Excluded Middle may be retained. Now the question is, does Aristotle follow such a procedure? It seems to me that Aristotle wants to deny (2) and (3) of future contingent singular propositions, while affirming (4). In III.B where he speaks not of propositions but of events themselves, he affirms the ontological counterpart of (3) in the sense that when the time arrives the event or its opposite must happen. But as for future-tense propositions about those events, he states in III.C that (3) does not hold. This is because the events are as yet indeterminate; hence, the propositions about them are also indeterminate in truth value. Therefore, although (4) may hold of future contingent singular propositions, (2) and (3) do not. It is idle to object against this that such a denial of the Law of Excluded Middle cannot be reconciled with Aristotle's passionate defense of it elsewhere¹²⁹, for in this very chapter he denies it of indefinite statements, and, what is more, he retains version (4) of it for future contingent singular propositions.

In addition, Aristotle emphasizes that the individual event is not necessary. As Frede points out, if this is to be the "same account" as the foregoing subsection, then "necessity" here probably means that same necessity that characterizes events in eternal, recurrent processes.¹³⁰ Aristotle is not, therefore, so much exposing a modal shift, as underlining the fact that the occurrence of the individual event is genuinely contingent. Tomorrow it is necessary that a sea battle occur or not—for the event and its opposite cannot both occur—but the occurrence of the battle is itself contingent, since it is not predetermined by the everlasting rotation of the spheres. Aristotle's concern with physical modalities in III.C helps to confirm that in this subsection the necessity of the individual events is physical, not the logical necessity characteristic of a fallacious modal shift. Now it may be conceded that I have been forced to bend Aristotle's language to make it fit this interpretation; but it seems to me that the wresting of texts would be even greater in the rest of the chapter were we to adopt the view that Aristotle here asserts the truth of future singular propositions while denying their necessity.

C. Application to Future Contingent Singular Propositions

In the final section III.C Aristotle draws the application of his discussion to future singular propositions (19a32-b4). Here the clash between the two camps comes to a head, each seemingly endorsed by Aristotle in juxtaposed statements. He begins by returning to his view of truth as

correspondence: statements are true according to how actual things are. How, then, are actual things? Aristotle answers, wherever things are such as to be contingent to opposites as chance has it (ὅσα οὕτως ἔχει ὥστε ὁπότερ' ἔτυχε καὶ τὰ ἐναντία ἐνδέχασθαι), necessarily the *antiphrasis* has the same character. Interpreters of the second camp take the above statement to mean that statements about contingent events share the same modal status with those events.¹³¹ But is this what Aristotle means? He is speaking of the *truth* of statements, not their modal status. If reality is determinate with regard to existence, then a corresponding proposition is determinate with regard to truth, and if reality is indeterminate with regard to existence, then a corresponding proposition is indeterminate with regard to truth. It is the determination of being which makes semantic determination possible at all, and parity demands that if being is indeterminate, then the corresponding propositions are semantically indeterminate as well. Hence, if being is in any given case genuinely open with regard to existence, then the corresponding existential statements must also be open to truth or falsity. With past and present things, this presents no problem, for they are no longer open to opposites, but are fixed (or temporally necessary). Hence, statements about them are no longer open to truth or falsity, but are either true or false. But some future singulars—ones which are not necessarily and always as they are—are genuinely open to opposites, so that the *antiphrases* must have the same character with regard to the truth values of its statements. Aristotle thus implies that future contingent singular propositions are not now true or false.¹³² But then Aristotle proceeds to state that with *antiphrases* composed of future contingent singular propositions it is necessary for one or the other statement to be true or false—not, however, *this* one or *that* one (τόδε ἢ τόδε), but as chance has it—or for one to be true rather (μᾶλλον) than the other, yet not already (ἤδη) true or false. This statement is the chief resource of the non-standard interpretation. It is taken as the best proof that Aristotle held future contingent propositions must be true or false, but contingently so. This seems to be a clear application of Excluded Middle in III.B: $\Box(p \vee \neg p)$, but not $(\Box p \vee \Box \neg p)$. But while this may be a plausible reading of the passage taken in isolation, it says nothing against the fatalistic difficulties, since the fatalist has proved that if p , then necessarily S will obtain. It seems more likely therefore to take Aristotle to mean that in an *antiphrasis* of future contingent singular propositions truth exists in the same way in which future things exist in reality: in potentiality.¹³³ One or the other proposition is potentially true, but neither is actually true. Just as in section III.B we saw that for a future event and its opposite, only one could be actual, yet at present both are in potentiality to existence, so

here we see that in an *antiphrasis* of propositions exactly one can have truth, yet both are still potentially true. Thus in 19b2-4, Aristotle asserts that what holds for things that are (namely, Excluded Middle) does not hold for things that are capable (δυνατῶν) of being or not being. These latter are future contingents, and propositions about them are not now true or false. This is why Aristotle adds the qualification—one or the other must be true, but not this or that one. Both are potentially true, though when the time arrives only one statement can be actually true. If this were not enough, Aristotle adds that it is necessary for one to be true rather than the other, yet not *already*.¹³⁴ Proponents of the second interpretation sometimes insist that ἥδη may have a non-temporal, logical meaning which is often left untranslated.¹³⁵ But while this is grammatically correct, the context here makes a non-temporal rendering unlikely.¹³⁶ Aristotle means that neither of the propositions is now antecedently true, though both are potentially true. His next statement appears to clinch the case for the standard modern interpretation: it is not necessary that of every affirmation and opposite negation one should be true and the other false. This is *prima facie* as clear as it could possibly be. Interpreters of the second camp must assume that there is an implied ἐξ ἀνάγκης in this sentence. This is possible, of course, but the question remains, why should we read this into the text? The evidence for the standard modern interpretation does not rest on a single proof-text or even on a few, but on the good sense that it makes of the chapter as a whole. Aristotle ends by denying what he said would lead to fatalism: that all future singular propositions are true or false. By denying that, he undercuts the fatalistic difficulties, since such a proposition is not antecedently true or false; and hence there is no necessity laid upon the future by the necessity of the semantic relation.

SUMMARY

In summary, we have seen that in chapter 9 of *De interpretatione* Aristotle argues that if one grants that the Principle of Bivalence holds for all future singular propositions, then fatalism results. For the semantic relation between propositions and corresponding reality is such that if a proposition is true, then necessarily reality must correspond to it, and if it is false, then necessarily reality must fail to correspond to it. Hence, if a future singular proposition has a truth value, future reality must eventuate according as the proposition is true or false. Because contradictions cannot exist in reality, the relevant state of affairs and its opposite cannot both be actualized; so when the time of the event arrives, one or the other state of affairs must be realized. Hence, in an *antiphrasis* of future

singular propositions, both cannot be true, nor can both be false. But both can be indeterminate, in that they lack a truth value. Hence, not all future singular propositions are true or false.

The joker in this deck, if we may call it that, would seem to be Aristotle's view of truth as correspondence.¹³⁷ It might be thought that a future singular proposition must be true if it corresponds to what will in fact be, and if not, then it is false. Accordingly, future-tense propositions must be as bivalent as past- or present-tense statements. But Aristotle apparently thought that if reality were as yet undetermined, then corresponding propositions were also indeterminate as regards their truth value. Ackrill explains that Aristotle held to "a rather crude realistic correspondence theory of truth, and we might well expect him to think that if the state of affairs now is such that it is not settled whether *x* will or will not occur, then '*X* will occur' is not now either true or false: there is not yet anything in the facts for it to correspond or fail to correspond with."¹³⁸ On such a view, the only future singular propositions which could now have a truth value would be ones about things which will happen necessarily as part of an everlasting cyclical process. In their case, although there is no future state of affairs now existent with which a proposition may correspond, nevertheless there are in the present the conditions which make the future realization of the state of affairs a necessity, and hence a future singular proposition may be truly asserted of it. But future contingent singular propositions have as yet no truth value. On the basis of the presently existing conditions all that may be truly said of a contingent future singular is "It is going to be." But in such a case, the truth of the proposition says nothing about the eventual actualization of the event—it may or may not occur. Aristotle does not explicitly say that future contingent singular propositions *become* true or false; but he says they are not already true or false. Technically speaking, they do not become true or false; it is the present-tense version of the statements that comes to possess a truth value. It is not unlikely that this distinction did not concern Aristotle, but he does not in any event commit himself clearly to saying the future-tense versions come to be true or false.¹³⁹ When the time of the event arrives, then exactly one of the states of affairs is actualized and in the *antiphrasis* one of the propositions becomes actually true in its present-tense version. Since future contingent singular propositions are not antecedently true or false, the argument for fatalism based on antecedent truth and the necessity of the semantic relation fails.

CHAPTER TWO

AUGUSTINE

During the ensuing centuries, Aristotle's *De interpretatione* became the subject of frequent commentary.¹ Ammonius and Boethius report that there had already been commentaries written by Aspasius (first century), Herminus and Alexander of Aphrodisias (second century), Porphyry (third century), Iamblichus (fourth century), and Syrianus of Athens (fifth century); Philoponus also commented on the work (sixth century), and Theophrastus, Aristotle's immediate successor at the Lyceum, may have also discussed it in one of his treatises. Around 363, early in the lifetime of Augustine, Marius Victorinus translated *De interpretatione* into Latin. There is, however, no indication that Augustine ever read the work. He never cites it and his own discussion of the problem of foreknowledge and future contingents reflects no contact with Aristotle's writing, but seems to have been stimulated principally by Cicero's *De fato*.² This is not surprising, for in the time following Aristotle's death the purely logical issues of antecedent truth and semantic necessity tended to be eclipsed by questions concerning freedom of the will and causal determinacy.³ This concern manifests itself in Augustine's own discussions of the problem of fatalism.

TURN TO THEOLOGICAL FATALISM

What is of special interest to us, however, is that under the influence of Neo-platonism and Christianity, the problem of fatalism has taken on a new guise: the problem of *theological* fatalism. Well before the time of Ammonius (d. 241-42) the relation of God's foreknowledge to human freedom was an oft-discussed question.⁴ Celsus in the second century, for example, had objected to Christianity on the basis of the fatalistic consequences of Christ's predictions of his betrayal.⁵ Origen defended the compatibility of foreknowledge and human freedom against Celsus's attack, charging that his opponent erred in thinking foreknowledge to be the cause of an event, rather than the reverse. According to Origen, though God's foreknowledge is chronologically prior to the event foreknown, it is not causally prior to the event and so places no necessity upon it. This interchange between Celsus and Origen was to have a considerable influence upon subsequent generations of Christian thinkers in their handling of the problem.

Since God's foreknowledge was a non-negotiable doctrine, the issue of theological fatalism was especially acute for Christian thinkers. As Baudry observes, denying foreknowledge was perhaps not so grave a difficulty for a philosophy which held that God ignores the entire universe; but for Christians the prophetic element in Scripture demanded God's knowledge of future contingents.⁶ Hence, when Cicero denies divine foreknowledge to preserve human freedom, Augustine scorches him for the "conspicuous act of madness" (*apertissima insania*) of simultaneously holding to God's existence while denying His foreknowledge.⁷ Even if Cicero agrees that God exists, still his denial of God's knowledge of the future amounts to nothing more than what "the fool hath said in his heart: there is no God" (Psalm 14:1). "For one who does not know all future things is surely not God."⁸

AUGUSTINE'S CONTEXT OF THEODICY

Augustine's fullest treatments of theological fatalism are to be found in the first four chapters of book three of *De libero arbitrio* and chapter nine of book five of *De civitate Dei*. We shall in our discussion focus our attention on the more extensive handling of the problem in the former work. The central issue in this work, as Augustine notes in his *Retractions*, is the origin of evil.⁹ The book derives its title from Augustine's conclusion that evil has no other origin than in the free choice of the will. He emphasizes that when he discusses the freedom of the will to do right, he is speaking of man's freedom prior to his fall into sin, subsequent to which the will suffers ignorance and inability from birth, unable to choose righteousness unless first liberated by God's grace.¹⁰ In this sense, the key question with regard to theological fatalism might be put: if God foreknew Adam's fall, then did Adam sin necessarily and not freely?

In book one Augustine inquires into the cause of evil. He differentiates between the evil a man suffers and the evil a man does.¹¹ God in His providence is the author of the evil a man suffers, since this is his just punishment for sin; but God is not the author of the evil a man does. Indeed, there is no single author of such evil—"Every evil man is the author of his evil deeds."¹² This differentiation presupposes that such deeds were done voluntarily, for "They would not be justly punished unless they were done voluntarily."¹³ It is not clear whether by *voluntate* Augustine means "freely." But he says as much when he proceeds to argue that sin must be voluntary, since a virtuous mind cannot be compelled to sin—not by a superior power, since any such power would also be just and, hence, would not induce the soul to sin; and not by any inferior power, since it is too weak to do so—and that therefore "Nothing

else can make the mind the companion of evil desire except its own will and free choice.”¹⁴ Freedom of choice, moreover, appears to entail the ability to choose between two opposing options. For evil is the neglect of eternal things, which the mind perceives, enjoys, loves, and cannot lose, and the pursuit of temporal things, which are perceived by the body and can never be possessed with complete certainty.¹⁵ “What each man chooses to pursue and embrace is within the power of the will to determine, and...it is only the will that can dethrone the mind from its citadel and despoil it of its right order.”¹⁶ The conclusion of book one is that reason has demonstrated that the cause of our doing evil is “the free choice of the will.”¹⁷ It certainly appears that Augustine wishes to affirm not only that we sin of our own will, but *freely* of our own will.

In book two he inquires whether God was right in giving man free will. His fundamental argument in this book for the appropriateness of man’s freedom of will is that “An action would be neither sinful nor righteous unless it were done voluntarily.”¹⁸ Neither just reward nor punishment, he contends, would be possible without free will. This provides sufficient grounds for God’s creating man with free will. The fact that men misuse their freedom to choose for evil rather than good is not sufficient reason for God to have withheld this freedom from man. His purpose in giving men freedom of the will was that they might choose the good; but men have turned from the unchangeable and common good to selfish goods and covetous and bodily desires. Since this aversion to the unchangeable good and conversion to changeable goods is not coerced, but voluntary, man’s consequent misery is a deserved and just penalty.¹⁹ But what is the cause of this movement of the will from immutable to mutable good? Augustine is baffled here, for that movement is evil, while free will is a good. But he insists that that movement is not caused by God, for God is not the author of evil. As to the cause, he acknowledges frankly that he does not know. For evil is a privation of being, and the movement of aversion, which is sin, is therefore a defective movement; thus it comes from nothing. And that which is nothing cannot be known. This is a difficult doctrine; but it seems clear at least that Augustine wants to remove from the soul all necessity of sinning. The choice to sin is entirely within our power: “Because that defective movement is voluntary, it is placed within our power. If you fear it, all you have to do is simply not to will it. If you do not will it, it will not exist.”²⁰ Augustine’s position in this work would have been clearer had he asserted that the freedom of the will entails the power to choose other than the will in fact does; but this seems to be implied throughout his discussion. The will is not free merely in the sense that its choices are not externally coerced, but also in the sense that, confronted with two options, it has the power to choose

either one. The implication is that Adam's fall into sin was entirely his own fault, since there was no cause which brought it about that he chose sin and since that choice lay within his power, genuinely open before him.

When we come to the discussion of theological fatalism in the third book, that issue lies squarely in the realm of theodicy. The book opens with a consideration and dismissal of the question whether the movement of the soul away from God might not be natural, like the falling of a stone to the earth.²¹ The discussion is instructive because according to Aristotelian physics such natural motions, like fire's rising or a stone's falling, need no external efficient cause, but arise simply from the nature of the objects involved. On such a view, the will's choices would all be voluntary, in the sense of not being externally coerced, and yet not truly free, since the natural *connatus* of the will would be to sin. This Augustine rejects, maintaining that the motion away from the Creator is not natural like that of a stone, but voluntary. The two motions are alike in that each belongs properly to the object itself and is not imparted from without; but they differ in that "...it is not in the power of the stone to arrest its downward motion, while if the soul is not willing it cannot be moved to abandon what is higher and to love what is lower."²² Thus, the stone's motion is natural, but the soul's voluntary. Hence, we charge the soul with sin when we show that it has abandoned higher for lower things. Once again, Augustine could have been clearer; his position would have been explicit had he written that it is not within the power of the stone to arrest its downward motion, but it is within the power of the soul to cease its movement to lower things. On the other hand, Augustine probably did not believe that once the soul had begun its aversion from God it could stop its course.²³ But he could have said prior to its sinning it was within the soul's power to sin or not to sin. But is this so far from what he did say? In the following section, Augustine's dialogue partner Evodius admits that there is nothing he feels more certainly and more personally than that he has a will that is his own:

But if this power which enables me to will or not to will is not mine, then I cannot readily find anything to call my own. So if I do wrong by my will, to what can I impute the act, if not to myself? ...But if the movement by which the will can turn in different directions were not voluntary and subject to our control, a man ought not to be praised or blamed when, so to speak, he turns the hinge of his will in the opposite directions of higher and lower good. And there would be no need at all to admonish him...to try to lead a good rather than a bad life.²⁴

The suggestion here—exemplified in the metaphor of the hinge—certainly seems to be that the mind is free to will one course or the other.

Augustine even speaks of exhorting a man to will one course rather than another (*male nollet uiuere, uellet autem bene*), which presupposes such a choice lies within his power. Hence, it would seem that in contrasting the motion of the stone to that of the will, Augustine is arguing that mere exemption from external coercion is not enough for an action to be voluntary and free—it must lie within the mind's power to will either of two opposite courses of action if the action chosen can be truly said to be voluntarily and freely chosen. Augustine is no closer to discovering the origin of that defective movement, but he insists that this is irrelevant, since we know that it is a movement belonging properly to the soul, that it is voluntary and therefore culpable, and that the value of Christian instruction lies in teaching us to condemn and restrain that movement.²⁵

AUGUSTINE'S PROBLEM OF THEOLOGICAL FATALISM

Evodius, however, is not yet satisfied. He broaches the problem of theological fatalism with these words:

...I have a deep desire to know how it can be that God knows all things beforehand and that, nevertheless, we do not sin by necessity. Whoever says that anything can happen otherwise than as God has foreknown it, is attempting to destroy the divine foreknowledge with the most insensate impiety. If God foreknew that the first man would sin—and that anyone must concede who acknowledges with me that God has foreknowledge of all future events—..., that which God foreknew must necessarily come to pass. How then is the will free when there is apparently this unavoidable necessity?²⁶

In Augustine's analysis, the nub of Evodius's difficulty lies in understanding how the two propositions are compatible: (1) "God has foreknowledge of all future events" and (2) "We sin voluntarily and not by necessity."²⁷ If God foreknows man will sin, then he must necessarily sin, which precludes voluntary choice. So one must deny either God's foreknowledge of all future events or that sin is committed voluntarily.

There has been some confusion concerning the precise formulation of this fatalistic argument. William Rowe summarizes the argument thus:

- (1) God has foreknowledge of all future events.
- (2) Hence, if a man is going to sin, God foreknows that he will sin.
- (3) Whatever God foreknows must necessarily happen.
- (4) Hence, if God foreknows that a man will sin, he must necessarily sin.
- (5) But if such a man must necessarily sin, there is no voluntary choice in his sinning.
- (6) Therefore, such a man does not have free will.²⁸

In Rowe's analysis, Augustine challenged (5), but the real error lies in (3). Jasper Hopkins, however, has attacked Rowe's formulation for lack

of precision and failure to capture the essence of the reasoning. The argument actually is:

- 1'. If God foreknows [all future things and hence foreknows] that a man is going to sin, it is necessary that the man sin.
- 2'. If it is necessary that the man sin, the man does not sin voluntarily but sins by necessity.
- 3'. Either God [does not foreknow that the man is going to sin and hence] does not foreknow all future things or else the man does not sin voluntarily but sins by necessity.²⁹

This formulation is supposed to be preferable because it reveals that the argument form is that of a dilemma. Augustine finds it as difficult to deny free will as divine foreknowledge. Rowe's formulation obscures this by beginning with the assumption of foreknowledge. Moreover, premiss (3) in Rowe's formulation attributes an ambiguity to Augustine which is textually unsupported. For 3.2.4.13-15 states that since God foreknew man would sin, it was necessary that there happen that which God foreknew; that is to say, it was necessary that man was going to sin. There is no ambiguity concerning the scope of the modal operator here. From this unambiguous premiss and the assumption of God's foreknowledge, it does follow that it is necessary that man sin; and contrary to Rowe this premiss is not *obviously* false.

It seems to me, however, that Hopkins, despite some helpful correctives, is being unnecessarily wooden and pendantic with what is a very casual statement of the argument on Augustine's part. The argument is introduced in 3.2.4, interrupted in 3.2.5 and summarized in 3.2.6. Hopkins reproduces nearly verbatim the summary in this last section as Augustine's argument. But clearly 3' above does not follow from 1'-2'; what follows is:

- 3''. If God foreknows that a man is going to sin, the man does not sin voluntarily but by necessity.

Obviously Augustine's capsule summary omits premisses which were explicitly stated earlier. Hopkins, as well as Rowe, must therefore add these premisses if the argument is to be complete. But in that case a certain latitude is inevitable and permissible in capturing the essence of Augustine's reasoning. Moreover, the modal operator is certainly ambiguous in the summary of 3.2.6, so that Hopkins's verbatim formulation is not superior to Rowe's on this score. When one adds the implicit premisses, it is not clear that this ambiguity must be resolved. For "*necesse erat*" in 3.2.4.14 is not so unambiguous as Hopkins suggests: "Since God foreknew that man sin, it was necessary that man would sin" could be construed to mean that it was necessary as a consequence that

man would sin. Hopkins may err in detaching the consequent from the antecedent and bringing the modal operator along with it.³⁰ And even if one does believe that the modal operator governs the consequent, it is not clear that Rowe's formulation is unsalvageable: for then he would simply say that (3) is false. Contrary to Hopkins, Rowe never states that it must be *obviously* false.

How then may the argument be accurately formulated? The following is, I think, a faithful rendering:

1. God foreknew that Adam would sin.
2. Adam sinned voluntarily.
3. If God foreknew that Adam would sin, then it was necessary for Adam to sin.
4. If it was necessary for Adam to sin, Adam did not sin voluntarily.
5. Therefore, Adam did not sin voluntarily.
6. Therefore, Adam sinned voluntarily and Adam did not sin voluntarily.
7. Therefore, either God did not foreknow that Adam would sin or Adam did not sin voluntarily.

Evodius's reasoning is that one must deny either (1) or (2). But as we have seen, Augustine has argued passionately for the truth of both. He therefore will expose the argument as fallacious by denying (3) or (4). This reformulation preserves the dilemma noted by Hopkins, while making explicit the tacit premisses which Rowe attempted to bring to light.

It is interesting to compare this argument with the Ciceronian fatalistic argument recounted in *De civitate dei*:

...if all future events are foreknown, they will take place in the order in which their occurrence was foreknown, and if they are to take place in this order, then the order is determined for a foreknowing God. If the order of events is determined, the order of causes is determined, for nothing can happen which is not preceded by some efficient cause. But if there is a determined order of causes by which everything that happens happens, then all things that happen happen by fate. If this is the case, there is nothing really in our power, and the will really has no free choice.³¹

In this case, he continues, exhortation to right and wrong, as well as reward and punishment, are vain. Cicero, states Augustine, reduces us to accepting one of two alternatives: either there is something within the power of our will or there is foreknowledge of the future. "If we choose foreknowledge of the future, freedom of the will is destroyed, and if we choose freedom of the will, foreknowledge of the future is excluded."³² Augustine goes on to make it clear that one can with equal validity begin with freedom of the will and reason back along the same chain to a denial of divine foreknowledge. Obviously there are many remarkable similarities between these two dilemmas, and one is led to wonder

whether the argument in *De libero arbitrio* is not also an argument concerning causal determinism. If so, then premiss (3) would mean that if God foreknew that Adam would sin, then it was causally determined that Adam would sin; in (4) it follows that his sin was therefore not voluntary. Augustine's concern with foreknowledge and future events appeared to be that such foreknowledge seemed somehow to bring about the events, thereby necessitating them. Thus in his commentary on John, he is at pains to make clear that although God foreknew the infidelity of the Jews, He nevertheless did not cause it.³³ Similarly, the prophets predicted this because God foreknew it would happen—it did not happen because it was predicted or foreknown.³⁴ In *De libero arbitrio* 3.4 Augustine's concern is to void the inference that foreknowledge causes what is foreknown. This consistent concern, as well as the many parallels between the present work and *De civitate dei* 5.9-10 make it not unlikely that Augustine equates necessity with causal necessity and opposes it to freedom and voluntary action.

AUGUSTINE'S SOLUTION

Opening Criticism

Augustine's solution to theological fatalism is also very difficult to sort out. It is not always clear whether he means to deny (3) or (4) or perhaps both. Augustine's opening criticism in 3.3.6 probes the possible application of Evodius's argument to God's foreknowledge of His own acts.³⁵ If all things foreknown by God are done by necessity and not voluntarily, then God's own acts will be done not voluntarily, but by necessity. Augustine seems to use "not voluntarily" and "by necessity" as synonyms, just as we saw he used "voluntarily" and "freely" as synonyms. His admonition seems to cast doubt therefore on (3), for God foreknows His own acts and yet these occur without necessity. Evodius attempts to escape this criticism by reminding Augustine that God is eternal and in Him no events occur; the argument concerns only things which happen within creation. This conception of God's eternity is, of course, one for which Augustine is famous. Taking over the Neoplatonic notion of timeless eternity, Augustine argued that God exists changelessly and timelessly, beholding the entire span of the temporal series in His eternal present.³⁶ One would expect, therefore, that Augustine would here affirm that God's knowledge of future created things is itself timeless and immutable and, hence, not strictly foreknowledge. How remarkable is it then when Augustine retorts to Evodius, "God, then, is not active in His creation?"³⁷ When Evodius

grants that He is, Augustine presses further: when He acts in creation does He not act precisely at the time at which the effect occurs? This is astounding from Augustine's lips, for he himself argues elsewhere that the difficulty of the origin of a temporal effect from a timeless cause is to be resolved by holding that God wills timelessly to produce a temporal effect, so that while the effect is new, the cause is not.³⁸ Anything new said of God results from a new relationship assumed by a creature to God, not from God's coming into a new relation with a creature.³⁹ Hence, while God's effects appear temporally and successively, God's causal activity is timeless. But here Evodius agrees with his Master that when God produces an effect in creation then God is working at that moment. Hence, it is indeed true to say that "God knows today what He is going to do a year hence."⁴⁰ The implication thus seems to be that if (3) were correct, then God's own actions would be fated to occur, which is simply intolerable. The most plausible explanation for Augustine's uncharacteristic argumentation seems to lie in Augustine's use of *sempiterna* instead of *aeterna* for "eternal." In this passage he takes God's eternity to be merely everlasting duration, not timelessness, and argues that even if God is immutable and everlasting, still since His actions are successive, He does foreknow His own actions. If Evodius's reasoning were sound, even God's actions would take place of necessity.

Foreknowledge and Freedom of the Will

Augustine then in 3.3.7 moves more earnestly to the attack. The point to be proved is that though God has foreknowledge of one's future act of will and though nothing can happen otherwise than as He has foreknown it, nevertheless it does not follow that one's future act of will occurs without one's willing it. This appears to be a mere tautology which solves nothing. But it is important to recall that for Augustine the motion of the will lies entirely within its own power, so that to say an act takes place by one's will is already to imply that it is freely done. So if willing is itself an action of the will it must be free. Hence, Augustine in this section argues that "If our very act of willing is not in our power, then you could not be conscious of anything else that is. Hence nothing is so much in our power as the will itself, for it is there at hand the very instant that we will something."⁴¹ The point seems to be that the fact of willing is the most immediate and essential function of the faculty of the will, so that since the will moves of its own accord this way or that, the act of willing can be directed freely to alternative courses of action. Hence, Augustine claims, though it would be correct to say, "We grow old not of our own will, but necessarily" or, "We fall ill not of our own will, but

necessarily'' or, ''We die not of our own will, but necessarily,'' only an idiot would say, ''We will, but not of our own will.'' These other actions happen against our will, but it is absurd to say that we will against our will. The upshot is that though God foreknows that I shall will something, that does not prove that I shall not will it freely, for the action of willing is inherently free. Hence, Augustine declares,

See, if you will, how anyone could make such a blind assertion as this: 'If God has foreknowledge of my future will, then I am necessitated to will what He had foreknown, since nothing can happen differently than God has foreknown it. But if I am necessitated, we must admit that I no longer will freely, but of necessity.' What sheer folly!⁴²

This assertion is sheer folly because willing is by nature an act of the will and hence cannot be necessitated. Augustine says it is ''astounding'' (*monstruosum*) that anyone should assert, ''It is necessary that I so will.'' ''He is trying to destroy the will by presupposing necessity, for if he is necessitated to will how can he will when there is no will?''⁴³

Suppose this same person objects that his will is not in his power because he is necessitated to will. Augustine responds that something is not in our power only if we will that thing but fail to obtain it. One recalls his earlier examples: I may will to stay young, but I cannot obtain it; or I may will to be immortal, but cannot obtain it; hence, it is not within my power to stay young or be immortal. But with regard to the will, it is within our power to control; otherwise we are not willing at all. In other words, I can will anything I please, though I cannot obtain everything I will. As Augustine says, our will would not be will unless it were within our power.⁴⁴ And because it is in our power, the will is free.

Hence, foreknowledge, far from being incompatible with free will, actually serves to guarantee it. For since God foreknows our future acts of will, these will come to pass as He foreknows them. He foreknows that these acts will be acts of our will and therefore within our power. ''The power, then, is not taken from me because of His foreknowledge, since this power will be mine all the more certainly because of the infallible foreknowledge of Him who foreknew that I would have it.'' ⁴⁵ The same point is made in *De civitate dei* 5.9-10.⁴⁶ He argues that even if there is in God's mind a definite pattern of causation which He foreknows, it does not follow that no room is left for the free choice of our will. For our wills are included in that very pattern of causes foreknown by God, since the wills of men are included among the causes of men's deeds. How then can the order of causes which is fixed in God's foreknowledge deprive us of the use of our will when our wills are an important part of the causal series itself? Our acts of will have just as much power as God

foresaw them to have. So whatever power they have, they have assuredly. Our acts of will will do what they are going to do because He whose foreknowledge cannot be mistaken foresaw that they would have the power to do it and would do it. He who foresaw what would be within our will foresaw a reality. So we are by no means compelled to abolish free will when we affirm foreknowledge or to deny foreknowledge if we adhere to free will. Man does not sin because God foresaw that he would sin. On the contrary, foreknowledge of the man's own choice guarantees that it is the man himself who sins. And if the man chooses not to sin, then God foreknows that he shall not will to sin and he certainly will not sin. The point Augustine appears to be making in both passages is that since God's foreknowledge is infallible and He foreknows that I shall freely choose to sin, therefore my freely chosen act will certainly come to pass. Thus, foreknowledge, far from being inimical to freedom of the will, actually guarantees it.

Evodius draws the conclusion to this chapter that Augustine evidently wants us to draw: that it is necessary that whatever God foreknows come to pass and that our will remains free and within our power.⁴⁷ It seems to me therefore that the thrust of Augustine's argument has been to deny premiss (3): If God foresaw that Adam would sin, then it was necessary for Adam to sin. What is necessary is that if God foresaw that Adam would sin, then Adam would sin. But it is not necessary that Adam sin, for "necessary" is equivalent to "non-voluntarily," that is, not of one's own will. But Adam certainly sinned of his own will and therefore freely. He could have chosen not to sin, and had he chosen, God would have foreknown this, and it would therefore have certainly come to pass. In *De civitate dei* Augustine distinguishes in this connection two kinds of necessity. First, there is the necessity which characterizes what is not in our power:

If the term necessity should be used of what is not in our power, but accomplishes its end even against our will, for example, the necessity of death, it is clear that our wills, by which we live rightly or wrongly, are not under such necessity.⁴⁸

For, he continues, we do many things which, if we were unwilling, we should not do. These things must then lie within our power. Now the primary member of this class of things is the will itself. For if we will, it exists, and if we do not, it does not exist. We would not will if we were unwilling. This is obviously the same analysis of necessity found in the argument explicated above. This sort of necessity is opposed to freedom and appears to be that necessity which Augustine denies with regard to premiss (3). But secondly, there is the necessity of essential predication:

But if the term necessity is used in the sense that it is necessary for something to be as it is, or happen as it does, I do know why we should fear that it may destroy our freedom or will. In fact, we do not make the life of God, or the foreknowledge of God, subject to necessity if we say that it is necessary for God to live forever and to foreknow all things.... The case is similar when we say that it is necessary, when we exercise will, to do so of our own free will. This... is undoubtedly true, yet we do not thereby put our free will under the necessity that takes away liberty.⁴⁹

This may be the necessity operative when Augustine states that it is a necessary that whatever God foreknows come to pass. That is to say, it is a necessary feature of God's foreknowledge that whatever is foreknown will happen. But the foreknown event is not itself necessary in the first sense. If premiss (3) were interpreted in terms of this second notion of necessity, it would be true, but then (4) would not follow, since (4) speaks of the first sort of necessity.

Compatibilism vs. Incompatibilism

Thus, as I read him, Augustine is not giving a compatibilist account of foreknowledge and human freedom. Therefore, I cannot agree with Rowe when he says,

Augustine's answer... is that even though a man *necessarily* wills to sin, he, nevertheless, freely wills to sin....

...Even though a man necessarily wills to sin, we cannot say that this sinful act of will is not in the man's power. For clearly the act of will would not occur if the man did not will.... The fact that a man necessarily wills to sin does not conflict with his freely willing to sin because his willing to sin (although necessary) is still in his power—for it would not occur were he not to will to sin.⁵⁰

On this view, an act qualifies as free if it is voluntary, that is, something one wills. And willing is not incompatible with necessity because although one could not will otherwise, the act is still done in accordance with one's will, not against it. Now it must be admitted that many of Augustine's statements could be read in this way, but on balance the evidence indicates otherwise. The most fundamental proof of the compatibilist interpretation is lacking in the text: a statement by Augustine that though a man necessarily wills, nevertheless he freely wills. In 3.3.8.96-7 Augustine deals with an objector who states that because it is necessary that he so will, his will is not in his power. But Augustine's refutation is not to show that these are indeed compatible, but to show that it is undeniable that one's will is in one's power. The implication is that one is not therefore necessitated to so will. (That was the objector's first point, which Augustine rejected as monstrous.)

Rather we have seen that in books one, two, and three Augustine appeared to affirm a view of the will which entailed the liberty of indifference. At the head of the discussion of fatalism (3.3.6), the two propositions to be shown to be compatible were "God has foreknowledge of all future events" and "We sin voluntarily and not by necessity." On the compatibilist view, Augustine has to reject the second as false, for we do indeed sin voluntarily and by necessity. But the whole intention of Augustine was to show that both propositions are true. The compatibilist view would also have to maintain that Augustine's solution to the problem of God's foreknowledge of His own acts (3.3.6.29-32) was that God acts of necessity, but by His own will, which seems unlikely, as Augustine affirmed that God did not create or perform other actions out of necessity. Section eight is especially hard on the compatibilist. He would have to say that what Augustine calls sheer folly is not the first sentence, "If God foreknows what I am going to will, then it is necessary that I so will," but the second, "But if it is necessary, then I no longer will voluntarily, but of necessity." But Augustine proceeds to attack the first statement. He calls the assertion monstrous that "It is necessary that I so will." Significantly, this is said to be the assertion of the madman referred to earlier (3.3.7.68-9) who said, "We will not of our own will." This shows that for Augustine being necessary to so will is equivalent to willing not of one's own will (*non uoluntate*). Just as it is absurd to will non-voluntarily, so is it absurd to will necessarily. Hence, the contrast between growing old, falling ill, and willing is now seen to be, not that one is against our will while the other is in accordance with our will, but that one happens necessarily while the other does not. Since these are meant to be illustrations of "in one's power," it seems evident that necessity is for Augustine incompatible with "being in one's power." This confirms what we saw before, namely, that the will is like a hinge, able to turn this way and that. Augustine proceeds to say that necessity removes (*auferre*) the will. He claims that it does no good to say that one's will is not within one's power because one is under necessity, for unless our will is in our power it is non-existent. If one has will it is within one's power; therefore one is not under necessity to will. Moreover, we saw in *De civitate dei* that Augustine asserts that man is free to sin or not to sin and that whichever he does will be foreknown by God. The will is said to be exempt from the necessity characterizing that which is not in our power, but that in another sense, not opposed to freedom, it is necessary that when we will, we will freely. On balance, therefore, it seems to me that Augustine is not here arguing as a compatibilist.

Two Final Questions

In the final chapter on the problem of divine foreknowledge and human freedom, a still sceptical Evodius presses three more questions, two of which need concern us: (1) How can God justly punish sins which are necessarily committed, and (2) how can they not be necessarily committed when God knows they will be committed?⁵¹ Augustine approaches these questions by exploring whether the problem of fatalism arises because of *God's* foreknowledge or simply because of foreknowledge. Evodius admits that if he were to foreknow that a man would sin then it would be necessary for the man to sin.⁵² So it is foreknowledge in general and not divine foreknowledge in particular that is problematic. But, Augustine points out, "Your foreknowledge would not itself make him sin, though he is certainly going to sin.... Therefore, just as these two are not at variance, namely your foreknowledge of what another will do and his freedom to do it, so though God does not force anyone to sin, yet He foresees those who are going to sin by their own will."⁵³ The point would seem to be that my knowing about something in advance can make absolutely no difference whether and how that thing occurs. It is certain that the event will occur, since it is foreknown, but its contingency is in no way removed by my knowing what is going to happen. The implication is that man's sins are not committed out of necessity; he does them freely and the fact that God knows in advance what he will do has no effect whatsoever on his decision to sin or not.

Hence, in answer to Evodius's queries, Augustine asks, why should God not punish sins which, though foreknown, were in no way compelled by God? He draws an interesting analogy to our knowledge of the past: "Just as you do not compel past events to happen by your memory of them, so God does not compel events of the future to take place by His knowledge of them."⁵⁴ The knowledge relationship is in no sense a causal relationship between knower and thing known. Though Augustine would no doubt say that future events are conserved in being by God, still they will be what they will be due to their secondary causes. Hence, De Celles would seem justified in commenting,

Although God's knowledge is surely unchangeable,³⁹ yet, when the content of that knowledge concerns deeds freely performed by creatures in time, there is a sense in which that content is "conditioned" by, or waits upon, so to speak, the direction a free choice takes. That is, although God infallibly knows what a man will decide before he decides it, yet nonetheless, His knowledge depends upon that decision.

³⁹DCD v.9.3. (PL 41, 150)....⁵⁵

God's knowledge of the future is thus more akin to our knowledge of the past. No necessity is imposed on the event simply by one's knowing

about it. Therefore, God is entirely just in punishing sin and rewarding righteousness, for these are freely done and God's foreknowledge of such acts in no way brings it about that they should happen.

SUMMARY

In summary, Augustine has argued that if anything is within our power to control, it is the will itself. Adam was free to choose things above or things below. God foreknew what he was going to choose, and therefore it was certain that that choice would occur. But God's knowing about it in advance in no way influenced the choice; Adam could have chosen either option. Whichever alternative he chose, God would have foreknown. In fact, God's foreknowledge that Adam freely choose one guarantees that Adam would *freely* choose one. It is necessary that whatever God foreknows should come to pass, but this necessity is not antithetical to human liberty. For though it is necessary that whatever God foreknows should happen, what is going to happen does not happen of necessity. What is going to happen is causally indeterminate and therefore free. Therefore, the origin of evil lies only in Adam's free choice, and God's foreknowledge of that choice in no way rendered it necessary; hence, God is just in punishing man for his sin.

FOREKNOWLEDGE AND ETERNITY

There is one final aspect of this problem which ought to be mentioned.⁵⁶ I earlier alluded to the fact that for Augustine God exists timelessly and that hence we should expect him to deny that God strictly foreknows anything. This Augustine in fact does, although it plays no role in his discussion of fatalism. Thus he writes to Simplician:

What then is foreknowledge, if not knowledge of the future? But what becoming is there in God, who transcends all time? If then God's knowledge possesses the things themselves, they are not for Him future, but present. It follows that one may not in this case speak of foreknowledge, but simply knowledge. But if things which will exist do not yet exist for Him anymore than for creatures in the temporal order, but He foresees them by His knowledge, then He apprehends them in two ways: on the one hand, via foreknowledge of future things and on the other via knowledge of present things. Therefore something temporal would be added to God's knowledge, which is both utterly absurd and utterly false.⁵⁷

The implication is that God does not in fact have foreknowledge of future existents; rather they are somehow present to Him in His eternity. I say "somehow" because Augustine did not seem to hold a view of time in which the future (or the past) is as real or existent as the present. The

eleventh book of his *Confessions* contains the fullest account of his intellectual struggles with this issue. Augustine held to a dynamical view of time which involved what has been called "the myth of passage," the belief that time somehow moves out of the future into the present and then away into the past. "Then, how do these two periods of time, the past and the future, exist," puzzles Augustine, "when the past is already not existing, and the future does not yet exist?"⁵⁸ He wonders how we can measure past or future time, "For, the past does not now exist and the future does not yet exist."⁵⁹ "So, who can measure the past periods which are already out of existence, or the future ones which do not yet exist—unless, perhaps, someone is going to dare to say that the non-existent can be measured?"⁶⁰ The reference to the past and future as "non-existent" (*quod non est*) is noteworthy, for this seems to indicate that Augustine regarded these periods as actually unreal, not merely "not yet" real or "no longer" real, which could conceivably be contrued to mean that the past and future are ontologically on a par with the present, though they do not exist simultaneously with the present. Yet the view that neither past nor future exists seems troublesome with regard to our knowledge of the future:

Who is there who will tell me that there are not three periods of time...; past, present and future, but that there is only the present because the other two do not exist? Or, do they also exist, but, when the present comes out of the future, does it proceed from something secret, and, when the past comes about from the present, does it recede into something hidden? Indeed where have the people who have foretold the future seen those things, if they are not yet in existence? For, what does not exist cannot be seen.⁶¹

Augustine here contemplates the idea of a past and future equally existent with the present, though somehow in a secret place, and conceives of foreknowledge on the model of visual preception, foresight of the things to come, which exist, but do not *yet* exist. On this model, foreknowledge of the future entails a view of time in which the future is ontologically on a par with the present; otherwise foreknowledge would be impossible. For "... it is not possible for a thing to be seen unless it is something existing."⁶² But Augustine rejects this static view of time and, hence, denies foresight of the future. He maintains that when men foretell the future, it is on the basis of inference from present causes or signs which are seen, for example, predicting the sun will rise on the basis of the dawning sky; but as for the future things themselves, they are neither seen nor do they exist. "Therefore, future things do not yet exist, and, if they do not yet exist, they are not existing; if they are not existing, they cannot possibly be seen. But, they can be predicted from present

things which already exist and are seen.”⁶³ If things are not yet (*nondum sunt*), then they simply are not (*non sunt*). “What is now plain and clear is that neither future nor past things are in existence, and that it is not correct to say there are three periods of time: past, present and future.”⁶⁴ But that means that foreknowledge, based on present realities, could in no wise embrace events which are causally indeterminate. While this conclusion comports with the limitations of human knowledge, it raises difficulties for divine knowledge. For how can God know the future if it does not exist? Augustine seems bewildered by this:

What, then, is this mode by which Thou teachest the things of the future—Thou to whom nothing is to come? Or, is it rather that Thou teachest present things about future events? For that which does not exist cannot, of course, be taught. This mode is too far away from my mental gaze; it has become too great for me, I cannot reach it....⁶⁵

Augustine returns to this theme only in the last chapter. There he speculates, “Indeed, if there be a mind reinforced by such great knowledge and foreknowledge, to whom all past and future things are known in the way that one very familiar song is known to me, then this mind is exceeding wondrous and so amazing as to inspire fear.”⁶⁶ To such a mind nothing that has happened in the past and nothing that will happen in the future remains unknown. Nevertheless, exclaims Augustine, such a conception fails to capture the nature of God’s knowledge: “But, away with the notion that Thou, Creator of the universe...—away with the notion that Thou shouldst know all future and past things in that way. Far, far more wonderful art Thou, and far more mysterious.”⁶⁷ For God’s knowledge is not temporal as in the case of one who listening to a familiar song remembers the past words and anticipates the coming words; rather His knowledge is immutably eternal. As Augustine elsewhere tersely puts it:

Everything past no longer exists, everything future does not yet exist, therefore nothing past and nothing future exists. But in God’s sight there is nothing which does not exist. Therefore, in God’s sight, [nothing exists] as past or future, but everything is now.⁶⁸

This is the same position as adumbrated in the treatise to Simplician. It presupposes the foresight model of foreknowledge: to be foreknown is to be foreseen, and nothing but present existents can be seen; therefore events are “present” to God and He “sees” them via *scientiam*, not *prae-scientiam*. But the nagging problem persists: if the future is literally non-existent—not merely not presently existent—, then how can it be present to God in His timeless eternity?

The answer would seem to be found in Augustine's Neo-platonism. According to Plotinus the immediate object of the *Noûs* is the realm of intelligible essences which constitute the archetypes for the existence of particulars in time and space. This intelligible world is conceived by Plotinus to be a realm of timelessly existing, essentially related forms. These intelligible forms are not only universal Platonic forms, but individual essences as well. Because the forms constitute an essentially interrelated unity, to comprehend one form is to comprehend them all. Intelligence is a sort of timeless intuition of these forms on the part of the *Noûs*. He writes,

Admiring this world of sense..., let us mount to its archetype, to the yet more authentic sphere: here we are to contemplate all things as members of the Intellectual—eternal in their own right,...—and, presiding over all these, the unsoiled Intelligence and the unapproachable wisdom.

That archetypal world is the true Golden Age.... For here is contained all that is immortal; nothing here but is Divine Mind; all is God.... Here is rest unbroken: for how can that seek change, in which all is well; what need that reach to, which holds all within itself; what increase can that desire, which stands utterly achieved? All its content, thus, is perfect, that itself may be perfect throughout, as holding nothing that is less than the divine, nothing that is less than intellective. Its knowing is not by search but by possession ...; for all belongs to it eternally and it holds the authentic Eternity imitated by Time which... makes toward the new thing and passes by the old. Soul deals with thing after thing—now Socrates; now a horse; always some one entity from among beings—but the Intellectual-Principle is all and therefore its entire content is simultaneously present in that identity: this is pure being in eternal actuality; nowhere is there any future, for every then is a now; nor is there any past, for nothing there has ever ceased to be; everything has taken its stand forever, an identity well pleased, we might say, to be as it is; and everything in that entire content, is Intellectual-Principle and Authentic-Existence; and the total of all is Intellectual-Principle entire and Being entire.⁶⁹

By comprehending the universal and individual forms, the *Noûs* comprehends all the spatio-temporal particulars which exemplify them. In such a fashion its knowledge of all things past, present, and future stands changelessly and timelessly. Now Augustine's conception of the objects of God's knowledge appears to have been essentially the same. He attached enormous importance to the doctrine of what Plato, he says, called "ideas":

Hence in Latin we can call the ideas either "forms" (*formae*), or "species," (*species*), which are literal translations of the word. But if we call them "reasons" (*rationes*), we obviously depart from a literal translation of the term, for "reasons" (*rationes*) in Greek are called *logoi*, not "ideas" (*idaea*). Yet, nonetheless, if anyone wants to use "reason" (*ratio*), he will not stray from the thing in question, for in fact the ideas are certain original and prin-

cipal forms of things, i.e., reasons, fixed and unchangeable, which are not themselves formed and, being thus eternal and existing always in the same state, are contained in the Divine Intelligence. And though they themselves never come into being and pass away, nevertheless, everything which can come into being and pass away and everything which does come into being and pass away is said to be formed in accord with these ideas....

....As for these reasons, they must be thought to exist nowhere but in the very mind of the Creator. For it would be sacrilegious to suppose that he was looking at something placed outside himself when he created in accord with it what he did create. But if these reasons of all things to be created or [already] created are contained in the Divine Mind, and if there can be in the Divine Mind nothing except what is eternal and unchangeable,... then not only are they ideas, but they are themselves true because they are eternal and because they remain ever the same and unchangeable. It is by participation in these that whatever is exists in whatever manner it does exist.⁷⁰

According to Augustine, the divine archetypal ideas not only served as the pattern for creation, but even after the creation serve as the medium by which God knows His creatures.⁷¹ Hence, it is not the creatures themselves which are timelessly present to God's *scientia*, but their archetypal ideas. The creatures in many cases do not yet exist and therefore are not "seen" by God; in this sense His knowledge of them may be said to be foreknowledge. But the divine ideas are always present to God's mind and are thus "seen" by Him; this is the sense in which Augustine could say to Simplician that God's knowledge possesses the things themselves (*scientia dei res ipsas habet*). Zimara comments,

Augustine never grounds either a constant *praesentia* of creatures to God's knowledge or his consequent disagreement with the strict use of the concept of foreknowledge in the thought of a constant coexistence of God with every instant of the flow of time and of the temporally transpiring being of things outside of God. *He speaks of a continuing presence of things and events before the knowing God, but means more precisely thereby merely the unchangeable and eternal presence of the divine 'rationes' of things and events.*⁷²

Hence, for Augustine God's knowledge in eternity of that which is future for us in time is not really foreknowledge, but simply knowledge of the equally eternal divine ideas. Again Zimara:

In the final analysis Augustine understands by the eternal presence of things to God's knowledge exclusively the eternal presence of the divine ideas thereof; and the eternal, unchangeable thought, which God has of particulars as well as of their interrelations with one another ..., *encompasses all the temporal states of the being in question*, so that God knows just as well when they have existence as when it is yet future or is already by.⁷³

Although Augustine did not employ this analysis of foreknowledge in solving the problem of theological fatalism—perhaps because he thought

that in a sense God's knowledge could be thought of as *foreknowledge* as well as knowledge—, nevertheless this conception of God's knowledge and eternity was to have a profound impact on how medieval theologians were to handle this issue, as we shall see with our next thinker.

CHAPTER THREE

BOETHIUS

Incarcerated and awaiting execution on a trumped up charge of treason, Boethius (d. 524) comforted himself by writing *The Consolation of Philosophy*. In book five of this work he deals with the problem of theological fatalism, an issue with which he had become familiar as a translator and commentator on Aristotle's *De interpretatione*. His discussion draws heavily upon the commentary of Ammonius and the tradition of Plotinus and Proclus in order to frame his solution, which would have a profound effect upon medieval theology's conception of God and His knowledge of the world.

PROBLEM OF THEOLOGICAL FATALISM

Statement of the problem

Boethius lays out the difficulty in section three of book five. Having concluded in section two that men have free wills and that the foresight of Providence sees all things from eternity and by predestination disposes of everything according to their merits, Boethius protests that it seems altogether impossible and repugnant that God foresees all things and that there should be free will.

For if God beholdeth all things and cannot be deceived, that must of necessity follow which His providence foreseeeth to be to come. Wherefore, if from eternity he doth not only foreknow the deeds of men, but also their counsels and wills, there can be no free will; for there is not any other deed or will, but those the divine providence, that cannot be deceived hath foreseen. For if things can be drawn aside to any other end than was foreknown, there will not be any firm knowledge of that which is to come, but rather an uncertain opinion, which in my opinion were impious to believe of God.¹

Boethius argues beginning with either the protasis or the apodosis of a conditional: If God foreknows the decisions of the human will, then what He foreknows necessarily comes to pass, so that it is not within man's power to will otherwise. If it is within man's power to will otherwise, then certain foreknowledge is impossible, which is contrary to the Christian doctrine of God. He fleshes out this skeleton argument in rejecting a purported solution of the problem.

Rejection of Origenist Solution

Some, Boethius reports, claim to resolve this difficulty by maintaining that nothing comes to pass because Providence foresees it, but rather Providence foresaw it because it shall come to pass. They argue that things which are foreseen do not happen necessarily, but that things that will happen are necessarily foreseen. This opinion belonged to Origen (c. 185-253), the influential Alexandrian theologian. In responding to Celsus's attacks upon Jesus's predictions of his betrayal, Origen comments,

Celsus thinks that if something has been predicted by some sort of foreknowledge, then it takes place because it was predicted. But we do not grant this. We say that the man who made the prediction was not the cause of the future event, because he foretold that it would happen; but we hold that the future event, which would have taken place even if it had not been prophesied, constitutes the cause of its prediction by the one with foreknowledge.... if it is possible for a particular event to happen and possible for it not to happen, either of these alternatives may come to pass. We do not maintain that the one who has foreknowledge takes away the possibility of an event happening or not happening; saying something of this sort: This will assuredly happen, and it is impossible for it to turn out otherwise.... And in fact, what is called by logicians an idle argument, which is a sophism, would not even be regarded as fallacious by Celsus (so mean is his ability), although by the standard of sound logic it is a sophism.²

According to Origen, if in the statement, "What he foretold must assuredly come to pass" the word "assuredly" means "necessarily," then the statement is false. But if it means only "it will come to pass," then it is true, for it is possible that what was foretold not come to pass, though it will in fact come to pass. It is not possible that Christ be mistaken in his foreknowledge, however, for if what he foreknew were going to be otherwise, then he would have foreknown it as such.³ What is foreknown does not cause the future event to take place necessarily; rather "... the truth about the future is decided by actual events."⁴ On Origen's view, then, foreknowledge only shows what will take place, not what must take place. The future event determines the foreknowledge, such that were the event not to take place, the foreknowledge would be different. But the foreknowledge in no way determines the occurrence of the event.

Against Origen, Boethius points out that this purported solution confuses the nature of the necessity involved in the argument. Origen thinks that the necessity is causal and that the question is whether the foreknowledge causally necessitates the things or whether the things causally necessitate the foreknowledge. In fact, however, it does not matter how the causal relationship is ordered: the things' occurrence is

necessary even if the foreknowledge does not cause the occurrence to happen necessarily. The necessity with which the argument is concerned is that involved in the correspondence relation between a proposition and the relevant state of affairs. Boethius gives this example: "For if any man sitteth, the opinion which thinketh so must needs be true, and again on the other side, if the opinion that one sitteth be true, he must needs sit."⁵ The example makes clear that for Boethius the necessity involved in the argument is the necessity of the semantic relation. He thereby reduces the problem of theological fatalism to the purely logical problem of fatalism. If a proposition is true, then the corresponding state of affairs must obtain. Boethius recognizes that this relation is asymmetric: one does not sit, he cautions, because the opinion is true, but rather the opinion is true because one sits down. He does interpret this asymmetry, however, in terms of causality: the cause of truth (*causa veritatis*) proceeds from the sitting. Yet the sitting is necessary in virtue of the semantic relation if the proposition in question is true.

Now, he argues, the same reasoning holds with regard to God's foreknowledge of future things. This reasoning would seem to commit him to the thesis of backward causation. His point seems to be that even if the effect (the truth of the future contingent proposition or God's knowledge thereof) should temporally precede the cause (the corresponding state of affairs), nevertheless the semantic relation necessitates that the state of affairs corresponding to the true proposition eventuate. Just as the actualization of the state of affairs entails that the corresponding proposition be true, so the truth of the proposition entails the actualization of the corresponding state of affairs: there is, states Boethius, a common necessity in both (*communis in utraque necessitas*). But, in fact, Boethius considers it preposterous to hold that the occurrence of temporal things should be said to be the cause of eternal foreknowledge. His objection to this thesis does not seem to rest on reservations about backward causation, for he conceives God's eternity to be timeless, so that there could be no question of retrocausation of God's knowledge. Rather his difficulty seems to be that such a doctrine calls into question God's sovereignty by affirming that things which happened long ago are the cause of His highest providence (*quae olim acciderunt causam summae illius esse providentiae*). This suggests that Boethius's actual opinion was that God's knowledge in some way causes the existence of the things known. In any case, this need not affect the issue at hand, for the fact remains that the semantic relation is such that if a proposition is true, the appropriate state of affairs must eventuate: "...as when I know anything to be, it must needs be; so when I know that anything shall be, it must needs be to come. And so it followeth that the event of a thing foreknown cannot be avoided."⁶

Finally, if one believes a proposition which does not correspond with reality, then one does not have knowledge but is deceived. So how is foreknowledge possible if the event foreknown is neither certain nor necessary (*certus ac necessarius*)? What is known cannot be otherwise than as it is known to be. "For this is the cause why knowledge is without deceit, because everything must needs be so as the knowledge apprehendeth it to be."⁷ So how can God foreknow uncertain future things? If He judges that things which possibly may not occur will inevitably occur, He is deceived. If He knows only that such things may or may not occur, then this is not genuine foreknowledge.⁸ Certainty of knowledge therefore appears to be incompatible with the uncertainty of the event. "But if nothing can be uncertain to that most certain fountain of all things, the occurrence of those things is certain, which He doth certainly know shall be."⁹ The point seems to be that if my future willing x or y is uncertain, then any future contingent proposition about those acts is also uncertain in its truth value and therefore God can have no certain knowledge of the future. Conversely, if the proposition is known certainly by God, then the state of affairs must in virtue of the semantic relation eventuate. Hence, Origen's claim that foreknowledge does not causally necessitate the eventuation of future things is irrelevant.

Despite the fact that Boethius identifies this argument with Cicero,¹⁰ it seems clearly Aristotelian, since Cicero's argument did not concern logical considerations, but Fate.¹¹ Boethius's argument is closer to the purely logical argument of *De interpretatione* 9.¹² Like Aristotle, Boethius proceeds to draw out the usual disastrous consequences of such a doctrine. There is no freedom in human counsels and actions. Rewards and punishments are given in vain and without merit. The distinction between virtues and vices becomes vacuous. Worse still, since Providence is the source of the order of things, God becomes the author of evil. Moreover, hope and prayer become futile. That being the case, mankind will have no means of approach to God and will fail and fall away.

Interpretation of Boethius's Formulation

Adams's Interpretation

It seems, therefore, that Boethius has presented a faithful version of the Aristotelian argument for fatalism cloaked in the robes of theological concerns. Marilyn Adams, however, discerns two distinct arguments formulated by Boethius and answered separately.¹³ The first argument, which Adams does not consider very interesting, is explained in 5.pr.3.4-

16 and was cited above; Adams calls this version the “fallacy of equivocation.” It holds that if it is necessarily true that everything foreknown come to pass, then everything foreknown comes to pass necessarily. The second argument is explicated in 5.pr.3.55-112, which concerns the incompatibility of uncertainty of events and certainty of knowledge and which I explicated as part of Boethius’s response to Origen; Adams labels this argument “assumptions about truth.” She takes this argument to be based on Boethius’s two commentaries on *De interpretatione* 9. Adams explains that Boethius interpreted Aristotle to mean that future contingent propositions are not definitely true or definitely false. Whether a proposition has a definite truth value depends upon whether the things to which it refers are definite or not. Things are definite if it is settled by what is real or actual in the past or present relative to T_n that x is (was, will be) at T_m . Future things that are definite are so because it is now settled that they shall be; hence, definite future events, like past/present events, are characterized by simple necessity. Future events which are not yet settled are indefinite. Propositions about definite future events are now definitely true or false; but propositions about indefinite future events are not now definitely true or false—these represent truth value gaps. Aristotle’s argument for fatalism is basically an attempt to show that everything happens of simple necessity. This raises problems for divine foreknowledge. Since propositions about future contingents are not now definitely true or false, they are unknowable. Therefore, if God knew such propositions, everything would be definite and happen of simple necessity. Now, Adams continues, if in the *Consolation* the word “certain” is taken to be a synonym of “definite,” then we have the same argument reproduced there as in the commentaries. This argument is different from the earlier argument because the first applied to present as well as future things, while this second argument poses special problems for foreknowledge of future things. Adams concedes that Boethius’s replies to these two arguments are not sharply distinguished from one another, but she finds the reply to the second argument in 5.4.75-5.6.94 and then the reply to the first argument in 5.6.94-134. The reply to the first argument is based on the distinction between simple and conditional necessity, while the reply to the second on the doctrine of divine eternity.

Assessment of Adams’s Interpretation

As plausible as Adams’s reconstruction is, however, it seems to me that she does not take sufficient cognizance of the structure of the argumentation as a whole. We have seen that Boethius presents the skeleton of his

argument first and then fleshes it out in response to Origen's solution. That argument was *doppelgängig*: one could either begin with God's foreknowledge and conclude to the bondage of the will, or one could begin with the freedom of the will and conclude to the uncertainty of foreknowledge. In refuting Origen, Boethius, after distinguishing between the causal and semantic relations, first proceeds from the fact of God's foreknowledge to the necessity of the things foreseen (5.pr.3.41-55), and then he reverses his procedure and argues from the uncertainty of the things foreseen to the uncertainty of foreknowledge (5.pr.3.55-81). This *doppelgängige* argumentation was summarized concisely and accurately by him in advance in 5.pr.3.6-16. By failing to discern this procedure, Adams mistakenly takes the second line of reasoning to be a separate and distinct argument. This not only forces her to break loose the argument from its context in response to Origen, but also to misconstrue Boethius's solution to the argument as a whole. On her account the solution to the first argument is not contextually distinct from the answer to the second and indeed comes after it, almost like an appendix. In fact, however, it seems that Boethius's response to the argument as a whole consists in asserting God's timeless presence to all events, the closing section aiming to show that knowledge of what is present is not fatalistic. As Huber encapsulizes it, "God's foresight discerns the future contingent as present in conditional necessity."¹⁴ Adams is misled by the role of present knowledge in the closing section to associate this with what she thinks to be the first argument, when in fact Boethius explicitly states that the connection he wishes to make is with God's timeless presence to all things. Hence, it seems to me that Boethius presents one double-faceted argument to which he proposes a single solution.

On the other hand, it could well be that Boethius in arguing from the negation of the apodosis to the negation of the protasis uses a different line of reasoning than in arguing from the protasis to the apodosis, and to that extent Adams might be vindicated. But is this in fact the case? Adams in effect reads what she takes to be Boethius's second and more important argument as a proof, not of logical fatalism, but of causal determinism. For on her analysis Boethius is arguing that since future contingents are not causally determined, propositions about them are not antecedently true or false and hence cannot be known by God. Therefore, if God does know the antecedent truth of all future-tense propositions, this can only be due to the fact that everything is causally determined—there is no causal contingency. Now the difficulty in assessing this interpretation is that, as we saw with Aristotle, it is true on the fatalistic view that foreknowledge is possible only in the case of events in everlasting, cyclical processes. Hence, if all future-tense propositions

were true, then everything would have to be causally determined. Nevertheless, that is not the heart of Aristotle's argument, but a tangential implication. Rather the heart of the argument lies in the necessity of the semantic relation between true propositions and the corresponding states of affairs. If *p* is true, then *S* must obtain, not because *p* could not be true unless *S* were causally necessary, but because truth as correspondence requires that the relevant state of affairs be actual if the proposition is true. It is tempting to slip from the logical considerations at the heart of the argument to the tangential truth of causal determinacy as a condition of foreknowledge. Clearly either Adams has made this slip in interpreting Boethius or Boethius has so slipped in interpreting Aristotle. Since Boethius associates the complaint of fatalism with Cicero, one is led to wonder whether it is not he who has strayed.

An answer to this question necessitates a comparison of the argument in the *Consolatio* to those in Boethius's commentaries. Boethius explains the problem of fatalism in these words:

...the syllogism is of this mode: if every affirmation is definitely true or false, negation will come out in the same way, so that everything happens by an inevitable reason of necessity; and if this is so, free choice perishes. But this is impossible; therefore it is not true that every affirmation or negation is definitely true or false. A syllogism [such as the following], however, shows that if they are definitely true or false, all things happen of necessity. Every definite truth or falsity about the future of necessity establishes the outcome of the matter, whether it is to be or not to be. But all future propositions are definitely true or false. In all things, therefore, there will be necessity of happening or not happening....¹⁵

Here Boethius clearly asserts that future contingent propositions are not definitely true or false. But what does this expression mean? Frede explains that Boethius's use of *determinate verum* and *indeterminate verum* has its roots in the commentaries of the Peripatetic School on Aristotle's discussion of fatalism.¹⁶ The question was whether in any *antiphrasis* one member is true and the other false, or as the standard formulation employed by the Peripatetics put it, whether truth and falsity are divided by the members (διαίρειν τὸ ἀληθὲς καὶ τὸ ψεῦδος; cf. Boethius's "*in his in quibus veritas et falsitas dividebatur*"). In normal *antiphraseis*, the members divide the true and the false in a definite (ἀφωρισμένως) way; but in an *antiphrasis* of future contingent propositions, the members divide the true and the false only in an indefinite (ἀορίστως) way. If truth and falsity were definitely divided, then fatalism would result due to the necessity of the semantic relation. Boethius seems to have followed Ammonius in this traditional Peripatetic position. He may therefore be said to be a supporter of the standard interpretation of Aristotle on this issue. He

does not mean that future contingent propositions, while true or false, are not necessarily true or false in the sense of causal necessity.¹⁷ For he does not reason that if future-tense propositions were all definitely true or false, then all future events must be members of causally necessary processes. Rather he expounds the Aristotelian arguments based on someone's asserting truly in advance of some event a proposition about that event, thereby making it necessary that the event occur. Hence, if fatalism is to be avoided, there must be truth value gaps associated with future contingent propositions. Boethius, it seems to me, has read Aristotle well, and accordingly he appears to mean by a proposition's being definitely true that it is actually true. Since in an *antiphrasis* of future contingent propositions, truth and falsity are not definitely divided, neither member is actually true and both are potentially true. Because a future contingent proposition is not now actually true, it is not necessary that its corresponding state of affairs be actualized. Thus, fatalism is avoided. Now the *reason* these truth value gaps exist Boethius finds in Aristotle's view of truth as correspondence.¹⁸ Past- or present-tense propositions are definitely true or false because they correspond to actual reality.¹⁹ Future-tense propositions are definitely true or false only if the states of affairs to which they correspond are causally necessitated by a cyclical process.²⁰ Otherwise their truth value is indefinite because the events with which they correspond are neither actual nor causally necessary.²¹ In application to an *antiphrasis* of such contingent propositions, the Law of Excluded Middle means that both cannot be true and both cannot be false, but that, in Adams's words, "When the future time in question comes, one or the other will be the case."²² Thus, it is this peculiar view of truth as correspondence that allows Boethius, like Aristotle, to claim that future contingent propositions are not now actually true or false. With this much Adams agrees. Nevertheless, she asserts that Boethius understands Aristotle's fatalistic argument to be that if future contingent propositions are true or false, then everything happens of simple necessity (= causal necessity).²³ She appears to base this assertion on the fact that for Boethius, propositions are only definitely true or false if the things to which they refer are definite; but if the things are indefinite, then the propositions about them are only indefinitely true or false. As she explains, for Boethius present/past things are definite (*definite*), stable (*stabilis*), and certain (*certus*).²⁴ These properties belong to all events past and present, whether they were simply necessary or conditionally necessary—that is to say, whether they were a part of an everlasting, cyclical series or were in themselves contingent but fell under the Aristotelian dictum that whatever is, when it is, is necessarily.²⁵ With future things only those which are simply necessary are definite, while all

contingent future events are indefinite (*indefinite*), variable (*variabile*), unstable (*instabilis*), not discrete (*indiscretus*), and uncertain (*incertus*).²⁶ Thus, if all future-tense propositions were true or false, then everything would have to be going to happen of simple necessity.

Now what Adams seems to have done is to have confused the argument for fatalism with the basis for the escape from fatalism. The fatalistic argument holds that if a future contingent proposition is true, then necessarily the state of affairs in question will become actual; the escape from fatalism contends that future contingent propositions are not true because the states of affairs to which they correspond are neither actual nor causally necessary. But Adams conflates these, contending that if all future-tense propositions are true, then everything occurs out of causal necessity. Now it is true that for Boethius propositions are definitely true or false only if the corresponding states of affairs are definite—though Adams recognizes “definiteness” has a different sense when applied to propositions than to things. And it is true that the only future-tense propositions which are actually true are those about things which are simply necessary—but the heart of the fatalistic argument is not that if all future-tense propositions were actually true, then everything would be causally necessary. Rather it is that truth as correspondence necessitates that the state of affairs corresponding to a true contingent proposition be actualized. One escapes this fatalism by maintaining that since the future events are causally indeterminate, the propositions about them are alethically indeterminate. One must keep separate the argument for fatalism proper and the peculiar view of truth as correspondence which allows Boethius and Aristotle to escape it.

At the same time, it must be admitted that Boethius himself tends to be very ambiguous in this regard. Thus, when we come to his discussion of God’s foreknowledge in his second commentary, he reasons that if God knows the future then everything is necessary and that if everything is not necessary, then God’s foreknowledge perishes.²⁷ He does not distinguish here causal from semantical necessity. But when arguing from foreknowledge to necessity, he seems to have in mind semantical necessity, for he appeals as usual to the argument for fatalism based on the necessity arising from one man’s asserting and another man’s denying the alternative members of a contradictory pair. Similarly in the *Consolation*, Boethius draws attention to the necessity of the semantic relation between a true proposition and its corresponding state of affairs. It must be admitted, however, that in the second *Gang* of his argument, in reasoning from uncertainty of events to uncertainty of foreknowledge, Boethius again does not clearly distinguish between semantical and causal necessity. Consider these four statements of the reasoning:

For if things can be drawn aside to any other end than was foreknown, there will not be any firm knowledge of that which is to come, but rather an uncertain opinion, which in my opinion were impious to believe of God.²⁸

Finally, if any man thinketh otherwise than the thing is, that is not only no knowledge, but it is a deceitful opinion far from the truth of knowledge; wherefore if anything is to be in such sort that the event of it is not certain or necessary, how can that be foreknown that it shall happen? For as knowledge is without mixture of falsity, so that which is conceived by it cannot be otherwise than it is conceived. For this is the cause why knowledge is without deceit, because everything must needs be so as the knowledge apprehendeth it to be. What then? How doth God foreknow that these uncertain things shall be? For if He judgeth that those things shall happen inevitably, which it is possible shall not happen, He is deceived, which is not only impious to think, but also to speak. But if He supposeth that they shall happen in such sort as they are, so that He knoweth that they may equally be done and not be done, what foreknowledge is this which comprehendeth no certain or stable thing? ...or in what shall the divine providence exceed human opinion, if, as men, God judgeth those things to be uncertain the event of which is doubtful? But if nothing can be uncertain to that most certain fountain of all things, the occurrence of those things is certain, which He doth certainly know shall be.²⁹

But thou wilt say: This is the question, whether there can be any foreknowledge of those things whose events are not necessary. For these things seem opposite, and thou thinkest that, if future things be foreseen, there followeth necessity, if there be no necessity, that they are not foreknown, and that nothing can be perfectly known unless it be certain. But if uncertain events be foreseen as certain, it is manifest that this is obscurity of opinion and not the truth of knowledge. For thou thinkest it to be far from the integrity of knowledge to judge otherwise than the thing is.³⁰

For thus thou arguest: If any things seem not to have certain and necessary events, they cannot be certainly foreknown to be to come. Wherefore there is not foreknowledge of these things, and if we think that there is any there shall be nothing which happeneth not of necessity.³¹

Boethius reasons from the lack of necessity and certainty in future things to the absence of genuine foreknowledge concerning such things; then he switches about and argues that if there is genuine foreknowledge about future things, then they are necessary. The ambiguity concerns the argument of the switch-back—is he here reverting to the reasoning of the first *Gang* of this argument or introducing a new argument? The context makes pretty clear that when Boethius first reasons from the lack of necessity in events to the uncertainty of foreknowledge, he is speaking of the causal indeterminacy of such events. Since they are indeterminate, future-tense propositions about them lack truth value as Aristotle argued, and they are therefore unknowable. Therefore, God cannot be said to

know them, since whatever is known is certain. Here the notion of certainty seems to be unrelated to causal necessity, but rather has to do with theory of knowledge. If God knows one part of a contradiction to be true, then truth and falsity are definitely divided between the members and the state of affairs corresponding to the true propositions must be actualized. Thus, if God did have certain knowledge of a future contingent proposition, the events described must necessarily come to pass. If this is Boethius's reasoning then we are back on the first *Gang* of the argument. On the other hand, it remains true that if God's knowledge is certain, it can be so only because truth and falsity are divided between the disjuncts of the *antiphrasis*, which can only be the case of everything happens of causal necessity. It may be that Boethius failed to keep these two elements distinct in his reasoning and hence the ambiguity. It seems to me, therefore, that while Adams is correct in drawing our attention to an aspect of Boethius's argument, she errs in thinking that this constitutes either the heart of the argument or an argument distinct from the first, aimed at proving causal determinism. Huber agrees that Boethius was more concerned with the logical rather than the causal aspect of the problem and that the problem of causal determinism is purely tangential.³²

BOETHIUS'S SOLUTION

Reconsideration of Origenist Solution

How, then, does Boethius respond to this argument? Before giving his own solution to the problem, Boethius first tries to analyze the problem so as to lay bare the essential issue. He does this via a dialectical argument in which he interacts further with the Origenist solution. In the first stage, his interlocutor Lady Philosophy demands of him why he thinks that free will is not constrained by foreknowledge, since foreknowledge is not the cause of any necessity in future things?³³ If there exists no causal relation between foreknowledge and the thing foreknown, how can God's foreknowing something place any restraint upon it? To make the point clear, Boethius imagines that there were no foreknowledge at all—would the decisions of the will be under any necessity in that case? Obviously not; but now let us suppose foreknowledge to be re-instated and to impose no causal constraint upon anything. How is the situation changed? Not at all; "... no doubt the same freedom of the will will remain whole and absolute."³⁴

In the second stage, Lady Philosophy surmises that Boethius will rejoin that foreknowledge is only a sign (*signum*) that future things shall

necessarily come to pass.³⁵ Even if foreknowledge did not exist, the events of the future would come to pass necessarily. A sign does not cause what it signifies, but merely shows that it is such. Hence, the issue is whether things come to pass necessarily, foreknowledge serving only to evidence this fact. Once again Boethius's use of "necessary" is ambiguous. Does he mean that foreknowledge is a sign that all events are causally determined by everlasting, recurrent processes, since only if this were the case could future events be foreknown? Or does he mean that foreknowledge is a sign that future contingent propositions are true or false, thus rendering the future necessary in view of the semantic relation? The answer is not clear. But Lady Philosophy argues that many things we observe in the present are obviously contingent. Since they are now free from necessity, then before they came to pass they were to come without necessity. Thus, some future events are free from all necessity (*omni necessitate*). By this phrase Boethius would perhaps understand both causal and semantic necessity. Now just as our knowing presently existing contingents imposes no necessity upon them, so God's foreknowing future contingents confers no necessity upon them, as was agreed in the first stage. Hence, future contingents, even if foreknown, remain contingent. The implication is that foreknowledge is not, therefore, the sign that everything happens of necessity.

But, Lady Philosophy continues in the third stage of the argument, you will say that this is precisely the problem: Granted that foreknowledge does not cause the future to be as it is and that it is not even a sign of the future's necessity, since contingency is evident all about us, how are foreknowledge and contingency compatible?³⁶ For if future things are foreknown, then they happen necessarily; and if future things do not happen necessarily, then they are not foreknown. This seems to be the nub of the problem, and Boethius will now move to his own solution of this difficulty. He has argued that God's foreknowing something is not the cause of its necessity, nor even the evidence of such necessity. Given his opinions expressed in his commentaries on *De interpretatione*, it would seem that foreknowledge, if it exists, would indeed be the sign of necessity in things, whether semantical or causal. For if God foreknows the future, then the future-tense propositions known by Him must be true, and, given Boethius's opinions on truth as correspondence, the corresponding states of affairs must eventuate. Moreover, those same opinions would imply that if God foreknows the future, the He can do so only because everything is causally determined. But since it is obvious that everything does not happen of necessity, God's foreknowledge cannot be the sign of such necessity. Boethius's escape from this antinomy will be to radically reinterpret the notion of foreknowledge so

that future contingents are not known by God in advance. For if God really did *fore-know* the future, then on Boethius's view, theological fatalism would follow.

Boethius's Own Solution

Knower and Known

Boethius opens by pointing out that all that is known is comprehended, not according to the force which things have in themselves, but rather according to the power of the faculty which comprehends them.³⁷ His point is that since the same object may be apprehended in different ways, the difference must be not in the object in the faculties. He gives the examples of an object apprehended by feeling and by sight and of man as apprehended by sense and imagination on the one hand and by reason and intelligence on the other.³⁸ These latter form a hierarchy, reason surpassing sense and imagination, and intelligence, a non-discursive intuition of forms, surpassing even reason. The lesson to be learned from this is that something which cannot be comprehended by an inferior faculty may yet be capable of comprehension by a superior one. Thus if some being possessing only sense and imagination should declare the knowledge of universals impossible, should not we who possess reason, capable of grasping universals, take the side of reason in such a dispute? But the situation is precisely the same when human reason declares that the divine intelligence cannot comprehend future things in any manner other than its own. If we could be lifted up to the height of the divine intelligence, we should see that just as sense and imagination must submit to reason, so reason must yield to the divine intelligence. The implication seems to be that human reason can know future things only by inference, insofar as they are causally necessitated by present conditions; accordingly, knowledge of future contingents is impossible. God, however, knows all future events in some higher way that does not remove the contingency of events, though they be known with certainty.

Divine Eternity

Having shown that an object is comprehended not according to the force which a thing has in itself but rather according to the power of the faculty which comprehends it, Boethius now turns to a discussion of the divine substance in order to discover the nature of God's knowledge.³⁹ The essential difference between God's knowledge of temporal events and ours is that God's knowledge is, like Himself, eternal. But what is eter-

nity? Boethius answers, "Eternity ... is the complete possession all at once of illimitable life...."⁴⁰ Stump and Kretzmann draw attention to four elements in this definition:⁴¹ (1) *life*: for Boethius unliving things such as numbers could not be said to be eternal. (2) *illimitability*: God's life has infinite duration in either "direction." It is not illimitable in the sense in which a point is, having neither beginning nor end because it is incapable of extension. For Boethius speaks of the fullness of divine life and of the eternal present remaining or enduring. In *De trinitate* he writes that God exists always. Moreover, his predecessors in this doctrine, Plato, Plotinus, and Augustine understood eternity to involve infinite duration, beginningless as well as endless. (3) *duration*: this is already evident from what has been said. (4) *complete possession all at once*: God's life is all at once, since it does not transpire sequentially, and it is complete because, having neither past nor future, it is present in its entirety.

These elements bear closer examination. It seems rather pedantic on Stump and Kretzmann's part to include "life" as an essential element in Boethius's definition of eternity. Being alive seems to contribute in no way to the state of being eternal. There seems no justification for the assumption that Boethius would not, like Plato, Plotinus, and Proclus, consider intelligible forms to be eternal.⁴² Indeed, by "life" (*vita*) Boethius may mean no more than "existence" or "being," for he contrasts God's eternity to temporal things, which "live in time," and he speaks of the span of the world's life, which though infinite is not eternal.⁴³ It seems clear that being alive does not contribute to being temporal, nor is the world alive. By *vita*, then, Boethius seems to understand no more than "existence," and eternity is therefore the perfect possession all at once of an illimitable existence.

Again, it is not clear that *interminabilis* is to be understood literally in the sense of infinite duration rather than merely having neither beginning nor end. When Boethius speaks of the "whole fullness an illimitable life,"⁴⁴ he is speaking of the absence of past and future for God in His timeless present. This would tend to strike against the notion of duration. Again, when Boethius speaks of God's present as "abiding," of God's "everlasting and present state," and of how God's knowledge "remains in the simplicity of His presence," he is contrasting the transitory temporal present with God's present, which does not come to be or pass away.⁴⁵ When Boethius applies *manere* to the divine present, he means to underline the fact that it does not like the temporal present transpire or elapse. This means that there is no time at which it may be truly said that God does not exist. But we may be pushing his language too far if we assert that he means that God's eternal present "is by definition

extended, pastless, futureless duration.”⁴⁶ Similarly, when he says God always exists, this means that there is no time at which it could be true that God does not exist—it does not mean God literally possesses duration, as Boethius explains:

But the expression ‘God is ever’ denotes a single Present, summing up His continual presence in all the past, in all the present—however that term be used—and in all the future. Philosophers say that ‘ever’ may be applied to the life of the heavens and other immortal bodies. But as applied to God it has a different meaning, He is ever, because ‘ever’ is with Him a term of present time, and there is this great difference between ‘now’, which is our present, and the divine present. Our present connotes changing time and sempiternity; God’s present, abiding, unmoved, and immoveable, connotes eternity; Add *semper* to *eternity* and you get the constant, incessant and thereby perpetual course of our present time, that is to say, sempiternity.⁴⁷

God’s “now” is a unity (*unum*) embracing past, present, and future, which never comes to be or passes away, in contrast to the fleeting “now” of the temporal process. To say God always is need not therefore entail duration, as would be the case with something which endured, even changelessly, through two moments of time. Indeed, it is difficult to make any sense out of duration which excludes time. Stump and Kretzmann acknowledge that the problem for us today is that we think of duration as persistence through time; but to the Greek mind, temporal duration was a flickering image of a fully realized duration, and the temporal uses of the term, not the atemporal, are metaphorical. “The notion of atemporal duration is the heart of the concept of eternity and, in our view, the original motivation for its development.”⁴⁸ But their treatment is disappointing in that they never do explain how “duration” can be used unequivocally in an atemporal sense.⁴⁹ Nor is it obvious that Boethius’s precursors understood atemporal duration to be more than a *façon de parler*.⁵⁰ Thus, Plato does speak of the nature of the ideal being as both αἰδιος and αἰώνιος without clearly distinguishing between its being eternal or everlasting and speaks of eternity as being “immovably the same.”⁵¹ But at the same time he says that whereas time is “moving according to number,” eternity itself “rests in unity.”⁵² According to Richard Sorabji in his study of time and eternity in Neo-Platonic and early Christian thought, Plato’s ambiguity in this regard forced Plotinus to make a decision concerning the duration of eternity and he came down in favor of timelessness without duration.⁵³ Now it is true that Plotinus speaks of eternity (αἰών) as being everlasting (αἰδιος); indeed, he asserts that “...in our very word, Eternity means Ever-being.”⁵⁴ Nevertheless, he also says it is necessary to conceive of eternity, not just as a standing still, but also as unity.⁵⁵ “All its content is in immediate concentration

as at one point; nothing in it ever knows development: all remains identical within itself, knowing nothing of change, for ever in a Now, since nothing of it has passed away or will come into being, but what it is now, that it is ever."⁵⁶ Plotinus compares eternity to a *σημεῖον*, used here as a synonym for *στιγμή*, mathematical point.⁵⁷ The "now" of eternity is like a mathematical point in which past, present, and future exist changelessly in unity. But as the temporal "now" can elapse, one wishes to say by contrast that this eternal "now" always exists; which raises difficulties, since "always" implies temporality. It would make sense to speak of a unity always existing, except when that unity is a unity of time itself, insofar as past, present, and future are all concentrated into the single "now." Hence, Plotinus cautions,

Observe that such words as 'always, never, sometimes' must be taken as mere conveniences of exposition: thus 'always'—used in the sense not of time but of incorruptibility and endlessly complete scope—might set up the false notion of state and interval. We might perhaps prefer to speak of 'Being,' without any attribute; but since this term is applicable to Essence and some writers have used the word Essence for things of process, we cannot convey our meaning to them without introducing some word carrying the notion of perdurance.

There is, of course, no difference between Being and everlasting Being.... We must take this 'Everlasting' as expressing no more than Authentic Being: it is merely a partial expression of a potency which ignores all interval or term and can look forward to nothing by way of addition to the All which it possesses.⁵⁸

Therefore, according to Plotinus, eternity simply *is*, and to say it is "always" means only that it is incorruptible and complete, that is, it does not cease to be or fail to contain all of the past, present, and future in itself—but to infer that it literally endures would seem to be a misnomer. Beierwaltes, whose commentary on *Ennead* 3.7 is lauded by Stump and Kretzmann as "an excellent presentation and discussion of Plotinus on eternity and time,"⁵⁹ concludes,

Eternity therefore is the unchangeable life of the Mind, abiding the selfsame in itself, being the Whole or All at once (because it is without past or future), which is alone with itself 'continually' thinking without interval or extension. This eternal self-presence of thought in being through life resembles a point, in which everything is collected at once in thinking, but which nevertheless does not relinquish its unextended unity, that is moved and lives in itself through thought, in that it 'proceeds out of itself into flux.'²⁶ Eternity is precisely this 'constantly' moved, unextended, timeless NOW, which collects everything at once in itself as in a point. NOW is identical with the 'Timeless-Present-Being.' Since Eternity is determined neither through the WAS nor through the WILL BE, the 'earlier' nor the 'later,' the 'before' nor the 'after,' it remains only that 'Eternity is in that which is Being'³¹: in the IS. This IS is always already NOW in that it is

the ‘fullness’ of Being always already thinking. Precisely in this characterization of Eternity as IS and NOW the Being of Eternity reveals itself to human thought as paradoxical: that Eternity, though it is not time, yet due to language’s being interwoven with temporality, must be assigned terms which originally had a temporal sense. IS and NOW, therefore, must in relation to Eternity be conceived atemporally, just as in the concepts of duration and motion one must in each case also convey their negation, if they are to capture adequately the Being of Eternity. Thus, Eternity is—like the highest concept of Plotinian philosophy, the ONE itself—only accessible to a negative dialectic, and this again only in an analogical sense: as the negation of time, as that which is dissimilar to time.

²⁶³, 20. ³¹³, 33 sq.: λείπεται δὲ ἐν τῷ εἶναι τοῦτο ὅπερ ἔστιν εἶναι.⁶⁰

Sorabji agrees, commenting that “Suggestions of duration are henceforth to be discounted, by reference to the idea of a non-temporal sense.”⁶¹ He specifically notes that Plotinus’s rejection of duration goes “far beyond” what Stump and Kretzmann are willing to allow.⁶²

Now when we turn to Boethius, we find that he also thinks of God’s eternity as a unity in which past, present, and future are combined in a single “now” or present. This eternal “now” in contrast to the temporal “now” may be said to persist and always be, but such terms have a different meaning in this case than in their usual employment. Boethius speaks of God’s knowledge as a never-failing instant (*numquam deficientis instantiae*)⁶³—it is like a point which is *interminabilis* in that it has neither beginning nor end and in which the past, present, and future are all combined into a single “now.” Sorabji concludes, *contra* Stump and Kretzmann, that Boethius like his Neo-Platonic forbears conceives of eternity as a timeless state which excludes duration.⁶⁴

If this is the case, then to state that duration is a property of eternity is incorrect. Indeed, one suspects that insofar as Stump and Kretzmann apply this notion to eternity, it is so equivocal as to mean no more than that God simply *is*, and never comes to be or passes away.

Finally the notion of “complete possession all at once” seems to be at the heart of the Boethian eternity. He holds that the temporal existent has its life only piecemeal: it has lost yesterday and not yet attained tomorrow.⁶⁵ All it possesses is a moveable and transitory moment. Hence, even should the world endure, as Aristotle thought, for infinite time, it cannot be called eternal. Therefore, those who heard that Plato thought the world to have neither beginning nor end ought not to fear that he thereby makes the creation co-eternal (*coaeternum*) with God. For it is one thing to be carried through an endless life and quite another to embrace the whole presence of an endless life together. Therefore, we should say that God is eternal (*aeternum*) and the world is perpetual (*perpetuum*).⁶⁶ Boethius seems to have forgotten the Christian doctrine of *creatio ex nihilo* in making this remark, but at least the contrast between perpetuity or

sempiternity and eternity is clear. Only that which lacks past, present, and future may be said to be truly eternal:

Therefore whatever includes and possesses the whole fullness of illimitable life at once and is such that nothing future is absent from it and nothing past has flowed away, this is rightly judged to be eternal, and of this it is necessary both that being in full possession of itself it always be present to itself and that it have the infinity of mobile time present [to it].⁶⁷

God's Knowledge and Eternity

This last phrase leads directly to Boethius's solution to the problem of God's foreknowledge of future contingents, a solution which, though anticipated by Ammonius and Proclus, had never before been explicitly defended by a Christian theologian.⁶⁸ Since God exists in an everlasting and present state, His knowledge also surpasses time and so in the simplicity of His eternal present comprehends the infinite stretch of time, past and future, and considers all things as though they were now going on.⁶⁹ Hence, rightly considered God's knowledge is not strictly knowledge of a thing to come, but of a never-failing instant. He overlooks, as it were, all things from the highest peak.

Boethius now draws the implication for the problem of theological fatalism.⁷⁰ If our sight of things present does not make those things necessary, why should it be thought that God's sight of things in His eternal present makes the things He observes necessary? His knowledge neither changes the nature of things nor errs in thinking contingent things to be necessary. As when I judge at the present moment that a man's walking and the sun's rising is the one contingent and the other necessary, so God knows all things truly and according to their proper natures. If it be objected that whatever God sees shall happen must necessarily happen, Boethius grants the point, so long as the necessity is properly understood. There are, he explains, two kinds of necessity: simple (*simplex*) and conditional (*condicionis*). As an example of simple necessity, he furnishes the proposition "All men are mortal." This proposition is necessarily true by virtue of the necessity of essential attribution. But we have seen that in his commentaries on *De interpretatione* 9 he also associates simple necessity with absolute causal necessity. If a state of affairs is simply necessary, it is unconditionally impossible for that state of affairs to be otherwise, whether because a logical contradiction would result or because there is no potentiality in nature for the existence of the opposite. As an example of conditional necessity, on the other hand, Boethius gives the proposition: "If you know that a man is walking, he is walking." For what is known cannot be otherwise than as it is known to be. But this conditional necessity does not bring with it

simple necessity. It is only necessary that the man walk *if* he is walking. In his commentaries on *De interpretatione*, Boethius calls this accidental necessity and identifies it with temporal necessity: it is necessary that Socrates sit *when* he sits.⁷¹ Interestingly, he states that this necessity results from the impossibility of performing contradictory acts. In this sense, to say that some action is temporally necessary means only that it is impossible to perform both that action and its opposite. Conditional necessity hardly, therefore, threatens human freedom. God's knowing all things as present only confers conditional necessity upon them. Boethius's point would seem to be that *if* God knows them, then necessarily those events come to pass, but it is up to the free decisions of men as to whether God knows them. It might be objected that since things necessarily come to pass if God knows them, then it makes no difference whether in themselves they are simply necessary or not. Boethius answers that it makes a great difference; for while all things exist necessarily when they exist, nevertheless before they exist some things must come to be while others are contingent. God's knowing these things does not remove the contingent nature from them. Hence, Boethius explains that it is impossible to frustrate God's foreknowledge: it is within one's power to change one's mind, but God, seeing all a man's decisions, knows whether he will or will not alter his decision. One can no more avoid divine foreknowledge than the sight of an ever-present eye observing all one's acts. This would seem to commit Boethius to the position that our actions cause the divine knowledge, which he earlier rejected. He denies this, however, declaring that God knows future things, not by their occurrence, but by His own simplicity. He seems to think that God's knowledge rather makes things to be as they are, but he does not explain himself and leaves this comment to be developed by others after him, as we shall see.

Be that as it may, he concludes that God beholds all things in His eternal present and that free will remains unviolated. Therefore, the only necessity laid upon us is the necessity of pursuing virtue and shunning vice, since we live under the eyes of our Judge, who beholds all things.

SUMMARY

With regard, then, to the problem of divine foreknowledge and human freedom, Boethius seems to have granted that future contingent propositions are as such neither true nor false because the corresponding states of affairs are indeterminate. Hence, they cannot as such be known by God. If He did know them to be antecedently true or false, then the corresponding states of affairs would have to occur necessarily. That does

not, however, mean that God has no knowledge of future contingents. Though we cannot know them, the faculty of divine intelligence exceeds the faculty of human reason by virtue of its eternity. In His timeless eternity God has no past, present, or future, but only a timeless present. In this eternal "now" the whole course of time is present to God and known to Him. He knows, as if present, which events are occurring contingently and which necessarily. His knowledge imposes no absolute necessity on the things He knows, but only a conditional necessity: *if* He knows them, then they must exist—but there is no necessity that He know them. Therefore, events which for us lie in the future are known by God as present and as occurring contingently, in so far as they are the product of our free decisions.

CHAPTER FOUR

THOMAS AQUINAS

If a theological fatalist is someone who believes that God's foreknowledge of future events is incompatible with contingency and human freedom, then Thomas Aquinas was a theological fatalist. Unlike Augustine and Anselm, he did not believe that one could accept that God foreknows future events and yet adhere to the contingency of the future states of affairs in question. The reason for this seems to have been that one version of the fatalistic argument, which did not confront his predecessors, namely, that version based on the unalterability of God's knowledge in the past, seemed to Thomas to escape all previous refutations which tried to show the compatibility of genuine foreknowledge and future contingency. Accordingly, he had to find another way out of the fatalistic dilemma.

GOD'S KNOWLEDGE OF NON-EXISTENTS

Aquinas's position on God's knowledge of future contingents will be more understandable if we consider it within the context of God's knowledge of things that do not exist.¹ Thomas maintains that God has knowledge, not only of all existents, but also of all non-existents because in knowing His own essence He knows them as producible in His power. Since He has complete knowledge of Himself and since He is the First Cause or ground of being for all that exists, in knowing Himself as the First Cause God knows all His effects.² But since His power is infinite, it is not exhausted by what exists; the divine essence can be mirrored as the exemplar for innumerable creatures. Hence, in knowing His power and essence, God knows all the beings that could exist but in fact do not. Thomas writes,

...through His essence God knows things other than Himself in so far as His essence is the likeness of the things that proceed from Him.... But since ... the essence of God is of an infinite perfection, whereas every other thing has a limited being and perfection, it is impossible that the universe of things other than God equal the perfection of the divine essence. Hence, its power of representation extends to many more things than to those that are. Therefore, if God knows completely the power and perfection of His essence, His knowledge extends not only to the things that are but also to the things that are not.³

There is, however, an important distinction to be made with regard to things that do not exist. For some beings do not exist *simpliciter*, whereas other beings do not exist *yet* or *any longer*. Beings which existed in the past or will exist in the future do not now exist, but nevertheless have a share in existence which pure possibles do not enjoy. Accordingly God's knowledge of these two classes of non-existents differs, as Aquinas explains:

Yet we have to take account of a difference among things not actually existent. Some of them, although they are not now actually existent, either once were so or will be: all these God is said to know by *knowledge of vision*. The reason is that God's act of knowledge, which is his existence, is measured by eternity which, itself without succession, takes in the whole of time; and therefore God's present is directed to the whole of time, and to all that exists in any time, as to what is present before him. Other things there are which *can* be produced by God or by creatures, yet are not, were not, and never will be. With respect to these God is said to have not knowledge of vision, but *knowledge of simple understanding*.⁴

The knowledge of vision is associated with God's timeless eternity in which He "sees" the whole temporal series laid out before Him. In effect, knowledge of vision is simply God's knowledge of the actual world. Thomas recognizes that the appeal here to vision is metaphorical⁵; but he unfortunately rarely if ever gets beyond the metaphor to explain the nature of this knowledge. If *scientia visionis* is simply knowledge of the actual world, it is not immediately evident why it must be associated with timeless eternity; why could not a temporal Deity know all past, present, and future states of affairs? Aquinas's answer is not all evident. One might expect him to answer along the lines of the Aristotelian view of truth as correspondence, whereby a proposition can have no antecedent truth value unless the state of affairs which it describes is actualized or necessary. Therefore, a temporal God could not know future contingent states of affairs. But, as we shall see, Aquinas did not appear to hold to this facet of Aristotle's view of truth. Indeed, in response to the objection that there are many eternal truths because future-tense propositions have always been true, Aquinas rejoins that such propositions have not been always true in themselves—since they have not always existed—, but that in the simple truth known in the divine intellect they have truth from eternity.⁶ I hope to explain this mysterious notion more fully later on; for now, however, the point is that future-tense propositions have truth from eternity in the divine mind. Therefore, it is very perplexing why a temporal Deity could not have knowledge of the actual world's future. It might be said that even the truth in the divine intellect is associated with eternity. This is true; but the focus is on eternity not in the sense

of timelessness, but of infinite past temporal duration. If such future-tense propositions have been known without beginning to be true in the divine intellect, then it is not clear why knowledge of vision must be connected with timeless eternity. It may be that the answer is that God could not always have known such propositions as true were it not for the fact that He timelessly knows them to be true. The reason He must know them timelessly to be true is that otherwise His knowledge could only be inferential, based on present causal conditions, whereas if He is timelessly eternal, He knows future things as they in some sense actually do exist. Thus, in his commentary on *De interpretatione*, he agrees with Aristotle that in the case of that which is indeterminate to either of two alternatives it cannot be determinately said either that it will be or that it will not be, for it is not determined more to one than the other.⁷ He explains,

...as long as something is future, it does not yet exist in itself, but it is in a certain way in its cause, and this in a threefold way. It may be in its cause in such a way that it comes from it necessarily. In this case it has being determinately in its cause, and therefore it can be determinately said of it that it will be. In another way something is in its cause as it has an inclination to its effect but can be impeded. This, then, is determined in its cause, but changeably, and hence it can truly be said of it that it will be but not with complete certainty. Thirdly, something is in its cause purely in potency. This is the case in which the cause is as yet not determined more to one thing than to another, and consequently it cannot in any way be said determinately of these that it is going to be, but that it is or is not going to be.⁸

“Determinate” here appears to mean “certain,” and Aquinas’s meaning seems to be that future contingent propositions cannot be asserted with complete confidence. Hence, if God were in time, He could not know the future, as he later explains:

...future things are not known in themselves because they do not yet exist, but can be known in their causes—with certitude if they are totally determined in their causes so that they will take place of necessity; but by conjecture if they are not so determined that they cannot be impeded, as in the case of those things that are for the most part; in no way if in their causes they are wholly in potency, i.e., not more determined to one than to another, as in the case of those that are indeterminate to either of two. The reason for this is that a thing is not knowable according as it is in potency, but only according as it is in act as the Philosopher shows in IX *Metaphysicae* [1051a22].⁹

Similarly, in *De veritate* Aquinas explains that what is necessary can be known even when it will happen in the future, as is the case with an astronomer’s knowledge of a coming eclipse, but a contingent cannot be known as future because it can be impeded before it is brought into

being. Even with regard to events which are not wholly indeterminate, but happen for the most part, God could only foreknow them inferentially in their causes as something that is going to happen (to recall Aristotle's distinction), but may not in fact happen. "God... also knows the relation of one thing to another, and in this way He knows that a thing is future in regard to another thing. Consequently, there is no difficulty in affirming that God knows something as future which will not take place, inasmuch as He knows that certain causes are inclined toward a certain effect which will not be produced."¹⁰ Foreknowledge of this sort is knowledge of true generalizations which may or may not hold in specific cases. In any given case, such inferential foreknowledge is possibly mistaken. Since divine knowledge, however, excludes all possibility of falsity, it would be impossible for God to have knowledge of future contingents if He knew them as future.¹¹ Hence, if God is to know future contingents He must know them in some sense as actual or existent. Now in His eternity, Aquinas believes, events which are future for us are present to God and known by Him as present. This is another metaphor, however, and would seem to mean that such events are somehow existent and actualized for God. This will require further comment in the sequel, but I think the point is clear that the association between knowledge of vision and God's eternity is based on the impossibility of knowing states of affairs which are as yet in potency for the knower, since only actualized or necessary states of affairs can be known.

Knowledge of simple understanding, on the other hand, is not knowledge of actual existents at whatever time. It is, in effect, knowledge of all possible worlds which God could actualize. It is associated with God's knowledge of His own essence and power. According to Aquinas, God knows actual existents under three modes: in His power as producible by Him, in their secondary causes in the temporal series, and in themselves as really existing. By contrast, since mere possibles never exist, He does not know them in themselves or in their causes, but only in His power.¹²

Similar to Thomas's distinction between *scientia visionis* and *scientia simplicis intelligentiae* is his differentiation between God's speculative (*speculativa*) and practical (*practica*) knowledge.¹³ An artist has both speculative or theoretical knowledge and practical knowledge of something that can be made. He possesses the former when he knows the intimate nature of a work without the intention of producing it. He has the latter when he by his intention makes the nature of the work his productive goal. Practical knowledge is directed toward production, speculative knowledge toward the consideration of truth. Practical knowledge follows speculative, and speculative can exist without prac-

tical. Now God has practical knowledge of all things that are, were, or will be, for these come forth from His knowledge as He decides. But He possesses speculative knowledge of all beings which He has not decreed to make. These “exist” in God’s power as producible by Him and in His goodness as potential expressions thereof. It seems clear that the extension of *scientia practica* is identical to that of *scientia visionis*, while that of *scientia speculativa* is identical to that of *scientia simplicis intelligentiae*. But the link between practical knowledge and divine eternity does not exist, for a temporal God could have complete intentional knowledge of His future creations. In this case God’s knowledge would not entail timeless eternity. It might be thought that such a conception of God’s foreknowledge would be deterministic, but as we shall see, Aquinas did not think that it was so—at least from God’s perspective. But he did think that God’s temporally prior knowledge of future events would be fatalistic and, hence, deterministic in that only if all events were part of an Aristotelian cyclical process could they be foreknown. Accordingly, we find that when he turns to the discussion of God’s foreknowledge of future contingents, the notion of practical knowledge is left aside in preference to God’s knowledge of vision.

GOD’S KNOWLEDGE OF FUTURE CONTINGENTS

This discussion concerning God’s knowledge of non-existents furnishes the backdrop for Thomas’s discussion of God’s foreknowledge of future contingents. It will be useful to follow Thomas’s own procedure and to consider first the principal objections to divine foreknowledge before looking at his own position and replies to the objections.

Objections to God’s Foreknowledge

1. Nothing but the true can be known. But in *De interpretatione* 9 Aristotle argues that there is no definite truth in future contingent singular propositions. Hence, God cannot have knowledge of these.¹⁴

2. Only that which is related to the act of existence can be related to the true. But future contingents do not have any act of existence. Therefore, neither are propositions about them true. Hence, there can be no knowledge of them.¹⁵

3. Whatever is known by God must necessarily be. For if what God knew to exist did not in fact exist, then His foreknowledge would be false. But this is impossible. Therefore, if God knows something to exist, it necessarily exists. But no contingent things must necessarily exist. Hence, God cannot have knowledge of contingents.¹⁶

4. The impossible does not follow from the possible. But if God foreknew a future singular contingent, then the impossible would follow, namely, that God's knowledge could be wrong. For suppose He foreknows some future singular contingent event, for example, Socrates's sitting down. Now either it is possible for Socrates to refrain from sitting down or it is not possible. If it is not possible, then it is impossible for Socrates to refrain from sitting down. Therefore, it is necessary that he sit down—but this contradicts the hypothesis that his sitting down is a contingent event. Therefore, it must be possible for him to refrain from sitting. But suppose that he exercises this ability and does not in fact sit down. This involves no contradiction. It would, however, entail that God's foreknowledge is in error, which is impossible. Hence, since the impossible does not follow from the possible, it must be impossible for God to know future singular contingents.¹⁷

5. If the antecedent of any true conditional statement is necessarily true, then the consequent is also necessarily true. Now the following conditional statement is true: "If God knew that this is going to happen, then it will happen." For since knowledge is only of the truth, if God foreknows something, then it must be true that it will happen. But the antecedent of the conditional statement above is necessary, for (i) whatever is eternal is necessary and all that God has known He has known from eternity; and (ii) the antecedent concerns a past state of affairs and whatever is said about the past is necessary because the past, having taken place, cannot have not-taken place. Since the antecedent is a necessary truth, so is the consequent. Hence, whatever is known by God is necessary, and He has no knowledge of future contingents.¹⁸

Thomas's Position on God's Foreknowledge

In the face of these objections, Thomas maintains that a denial of God's knowledge of future contingents cannot stand because this would undercut God's providence over human affairs. But neither, on the other hand, can fatalism be embraced, for then advice would be futile and reward and punishment unjust. Thomas finds the escape through the horns of this dilemma via God's timeless knowledge of vision. A contingent event, he explains, can be considered in two ways:¹⁹ (1) in itself, as already in a state of actuality. So regarded, the event is not future, but present and hence determinate. In this condition it can be the object of certain and infallible knowledge while remaining yet contingent. For example, when I see Socrates sitting down, my vision of this event, though certain, does not remove from the event its contingent character. It is not necessary that Socrates sit down, and yet as I see him

sit I cannot be mistaken. Aquinas's point is not that ocular delusion is impossible, but rather that my vision is of a fully determinate event which cannot turn out to be otherwise and so render the judgement based on my perception mistaken. He comments, "Now from the fact that man sees Socrates sitting, the contingency of his sitting, which concerns the order of cause to effect, is not destroyed; yet the eye of man most certainly and infallibly sees Socrates sitting while he is sitting, since each thing as it is in itself is already determined."²⁰ As he explains elsewhere, after a contingent event has been brought into being, it can no longer be prevented.²¹ Hence, a cognitive power can make a judgement about a present contingent in which falsity is never to be found. (2) A contingent event may be considered in its proximate cause. So considered, it is going to occur as an event which is not yet determined between two opposing states of affairs. It is therefore not a subject of certain knowledge. Anyone who knows a contingent event only in its cause has merely conjectural knowledge of it.

This distinction provides the clue that enables us to understand how it is that God can have certain and infallible knowledge of future contingents. In His timeless eternity, all events—past, present, and future—are present to God and laid bare to His gaze. He knows them infallibly with His knowledge of vision, yet because they are present to Him, such knowledge does not remove from them their contingency. Aquinas explains,

The contingent is opposed to the certitude of knowledge only so far as it is future, not so far as it is present. For when the contingent is future, it can not-be. Thus, the knowledge of one conjecturing that it will be can be mistaken: it will be mistaken if what he conjectures as future will not take place. But in so far as the contingent is present, in that time it cannot not-be. It can not-be in the future, but this affects the contingent not so far as it is present but so far it is future. Thus, nothing is lost to the certitude of sense when someone sees a man running, even though this judgement is contingent. All knowledge, therefore, that bears on something contingent as present can be certain. But the vision of the divine intellect from all eternity is directed to each of the things that take place in the course of time, in so far as it is present.... It remains, therefore, that nothing prevents God from having from all eternity an infallible knowledge of contingents.²²

Thomas here argues first that in so far as a contingent is present it may be the subject of certain knowledge. He makes more explicit, however, that this is because at the moment of its existence, the contingent cannot not-be. This brings to mind Aristotle's notion of temporal necessity, which appears to lie just beneath the surface here. A present event is causally contingent, but temporally necessary in that it can no longer be the case that at that moment the event not occur. Aquinas declares,

“... from the moment that it is, it cannot not be when it is; for, ‘what is must be when it is,’ as is said in *Interpretation*. It does not follow, however, that it is necessary without any qualification or that God’s knowledge is defective—just as my sense of sight is not deceived when I see that Socrates is sitting, although this fact is contingent.”²³ Thomas agrees that once something is present, it is temporally necessary, but he insists that this in no way removes the contingency of the event. Having argued that the contingent when present may be the object of certain knowledge, he then makes the ingenious move of contending that in God’s eternity all events are present and so infallibly knowable. God, he says, exists as an ever-abiding, simultaneous whole; but the duration of time is stretched out through the succession of before and after. The proportion of eternity to the total duration of time is therefore that of an indivisible point to a continuum—not, indeed, a point on the continuum but lying outside it. The relation of God to the temporal series may be compared to that between the center of a circle and its circumference. Any point on the circumference, through indivisible, does not exist “simultaneously” with any other point in regard to position. But the center of the circle is directly related to every point on the circumference. Letting the center represent eternity and the circumference the temporal series, we may see that while no event in the series is simultaneous with any other, nevertheless, eternity is simultaneously present to all the events in the series. In this sense, all the events may be said to be present to God:

Hence, whatever is found in any part of time coexists with what is eternal as being present to it, although with respect to some other time it be past or future. Something can be present to what is eternal only by being present to the whole of it, since the eternal does not have the duration of succession. The divine intellect, therefore, sees in the whole of its eternity, as being present to it, whatever takes place through the whole course of time. And yet what takes place in a certain part of time was not always existent. It remains, therefore, that God has a knowledge of those things that according to the march of time do not yet exist.²⁴

God, thus, does not experience events successively as past, present, and future, as we do; rather the whole time line, if you will, is stretched out before Him. He does not, as some critics have alleged against this view, see all events as simultaneous with each other²⁵; rather He sees at once all the events and all the relations of before and after between them. Aquinas is fond of comparing God’s knowledge to the vision of a man high on a watchtower, who in a single glance surveys the whole train of travellers along the road below.²⁶ Each traveller corresponds to an event in time, and while a person standing on the road sees them passing by successively, the man in the watchtower sees all of them in a single

moment. "God," Thomas writes, "... is wholly outside the order of time, stationed as it were at the summit of eternity, which is wholly simultaneous, and to Him the whole course of time is subjected in one simple intuition."²⁷

Thus present to Him in eternity, all events, including future contingents, are known by God *via* knowledge of vision. Aquinas sums up his position:

Therefore, since the vision of divine knowledge is measured by eternity, which is all simultaneous and yet includes the whole of time without being absent from any part of it, it follows that God sees whatever happens in time, not as future, but as present. For what is seen by God is, indeed, future to some other thing which it follows in time; to the divine vision, however, which is not inside time but outside time, it is not future but present. Therefore, we see what is future as future because it is future with respect to our seeing, since our seeing is itself measured by time; but to the divine vision, which is outside time, there is no future.²⁸

In seeing all things as present, God technically foreknows nothing. Again, the charge of some critics that if "to know the future" means "to know a fact which comes later in the time series than some other fact" then we know the future, too, since we know events which *were* future when, say, Cleopatra was a girl, is misconceived.²⁹ "To know the future" means to know *all* events later in the time series than *any* given event, a power humans certainly do not share. Thus, it is not the case that on Aquinas's view we must say that God knows that a man *is landing* (not *will land*) on Mars—a statement which is false and hence not knowable by God. Rather for Aquinas God knows that the proposition "Men *land* on Mars at t_n " is true; or to be more faithful to Thomas's own formulation, God knows that the proposition "Men are landing on Mars" is true at t_n , after being false at t_{n-1} . Again, there also seems to be little substance in the charge that on Aquinas's view we must say God knows nothing now.³⁰ For God knows everything; but since He transcends the temporal series one cannot say He knows something *at this time*. One can, however, assert "It is true now that God timelessly knows everything," or "It may be truly asserted now that God timelessly knows everything." Similarly, it is not the case that with regard to prophecy, God knew *then* that the Jews would be converted. Rather it was true to assert then that "God knows timelessly that at t_n the Jews *convert*." Aquinas's view, properly understood, holds that God timelessly knows all events and what propositions are true at what times in the temporal series, but that His knowledge of these events and propositions no more imposes necessity upon them than our knowledge of the present moment imposes necessity upon the things that now exist.

Answers to Objections

Turning then to the five previous objections, Aquinas responds to the first objection based on the indeterminacy of truth value of future contingent singular propositions that "Although a contingent is not determined as long as it is future, yet, as soon as it is produced in the realm of nature, it has a determinate truth. It is in this way that the gaze of divine knowledge is brought upon it."³¹ This raises the difficult question of what Aquinas means by determinate truth. Does he mean that such a proposition becomes temporally necessarily true or that it becomes capable of being certainly known to be true, or that it simply becomes true? Unfortunately he never explains what he means by this expression. In his commentary on *De interpretatione* 9, he states that Aristotle's whole concern is whether for future contingent singular propositions it is necessary that one of the opposites be determinately true and the other determinately false³²—but he does not define his terms. There are some indications that he held that future contingent singular propositions are neither true nor false. For example, in his exposition of Aristotle's second fatalistic difficulty, Aquinas drops the language of "determinately true" and explains how the simple truth of such propositions entails fatalism.³³ On the other hand, "determinately" may be implicit. He also understands Aristotle's argument that we cannot say that neither member of the *antiphrasis* is true to mean that both cannot be false.³⁴ This is characteristic of the standard interpretation. His comments on Aristotle's remarks on Excluded Middle are ambiguous: he states that it is necessary of a disjunction that it will or will not be in the future and this because contradictories cannot be at once both true and false; but if one of the disjuncts is taken separately, it is not necessary that that one be absolutely.³⁵ Aquinas concludes with this comment:

It is evident from what has been said that it is not necessary in every genus of affirmation and negation of opposites that one is determinately true and the other false, for truth and falsity is not had in the same way in regard to things that are already in the present and those that are not but which could be or not be.... In those that are, it is necessary that one of them be determinately true and the other false; in things that are future, which could or could not be, the case is not the same.³⁶

The ambiguity is frustrating to the reader of Aquinas, but I think that the best sense of his comments can be made if we take "determinate" to mean something like "certainly knowable." I say this chiefly on the strength of a passage in *De veritate* where Thomas seems to assert pretty clearly that the correspondence theory of truth does not require that the states of affairs described by a proposition must exist in order for that proposition to have a truth value. In Thomas's understanding "*True*

expresses the correspondence of being to the knowing power...."; it is a "conformity of thing and intellect."³⁷ For Aquinas "... *true* is predicated primarily of a true intellect and secondarily of a thing conformed with intellect."³⁸ Truth is not so much a property of propositions as of intellects and things, when the things exist as the intellect judges them to be. In the act of judging, the intellect possesses truth, and a judgement is said to be true when it conforms to the external reality.³⁹ Now, Aquinas explains,

In this commensuration or conformity of intellect and thing it is not necessary that each of the two actually exist. Our intellect can be in conformity with things that, although not existing now, will exist in the future. Otherwise it would not be true to say that "the Antichrist will be born." Hence a proposition is said to be true because of the truth that is in the intellect alone even when the thing stated does not exist.⁴⁰

Aquinas seems to contend that even if there is no truth in the thing, since it does not yet exist, still there is truth in the intellect which has formed the future-tense proposition. Hence, one cannot say that future contingent propositions lack truth value because of a failure to correspond. The only escape from this conclusion would seem to be to maintain "The Antichrist will be born" is necessary, which it quite plainly is not—at least in the Aristotelian sense. There would therefore be no grounds for denying truth value to future contingent singular propositions. Aquinas thus sees no fatalistic implication from the antecedent truth of future-tense propositions. But in that case, to say that such propositions are not *determinately* true or false must mean that we cannot know for certain—as Thomas often emphasizes—whether they are true or false. Interestingly, since the reason we cannot know for certain is because future contingents are causally indeterminate, this analysis of "determinate" seems to imply necessity as well, when necessity is understood as the causal necessity of everlasting cyclical processes. Unless the events in question have this necessity, the propositions about them are not certainly true or false, though in an *antiphrasis* of future-tense propositions, one proposition, unknown to us with assurance, is true and the other false. Therefore, it seems to me that Kenny is mistaken when he asserts that on Aquinas's view future-tense propositions have a truth value in eternity but lack one in time.⁴¹ Kenny is correct that for Aquinas a future contingent proposition cannot be known *qua* future; but the emphasis here is on *known*, for while it cannot be known to be true because of the indeterminacy of its proximate causes, nevertheless it is either true or false.

Thomas's answer to the first objection, then, appears to be that future contingent singular propositions are not certainly knowable to be true or

false. If God were in time, He could not know for certain the truth of such propositions. But in His eternity, the events of the future are present to Him and, hence, propositions about them can be certainly known to be true or false. "Neither our [knowledge] nor God's knowledge can be about future contingents. This would be even more true if He knew them as future. He knows them, however, as present to Himself and future to others."⁴² Interestingly, this seems to commit Aquinas to the thesis of the timelessness of truth, at least from God's perspective. For God all future-tense statements may be translated into tenseless propositions with definite temporal indexicals which are timelessly true or false. Thus, from God's perspective, "Socrates *sits* at 396 B.C." is timelessly true, and He knows it as such. One might therefore think that Aquinas would agree with those contemporary philosophers who would escape fatalism by maintaining that the timeless truth of propositions does not entail the temporally antecedent truth of future-tense statements.⁴³ Nevertheless, Aquinas explicitly rejects the position which claims that past, present, and future propositions may be translated into a tenseless idiom and cannot change in truth value.⁴⁴ Rather he maintains that God knows which propositions are true at one time and false at another. But even if all propositions cannot be translated into a tenseless idiom, it seems undeniable that on Aquinas's view God's knowledge of future contingents is knowledge of such timelessly true propositions. And since obviously all events, whether past, present, or future, are equally real to God, it follows that He knows the timeless truth of propositions about past and present events as well. Thus, even if Aquinas denies that all propositions can be translated without loss into a tenseless form, nonetheless, he seems compelled to admit that God's knowledge of vision is exclusively of such tenseless propositions. Even the knowledge that some proposition p is true at t_1 and false at t_2 is itself knowledge of a timelessly true proposition about a temporally true proposition at designated times. Hence, his escape from fatalism is that the timeless truth of propositions known by God does not eliminate the contingency of the events corresponding to these propositions.

As for the second objection concerning the existence of future contingents, Thomas replies, "Although a contingent does not exercise an act of existence as long as it is a future, as soon as it is present it has both existence and truth, and in this condition stands under the divine vision."⁴⁵ But the oddity in this reply is that the future contingent is conceived of as timelessly present to God, and therefore it always has existence and truth. There is a tension here between real becoming and timeless presence. More will be said of this later, but Aquinas's position seems to be that although past/future events do not now exist, never-

theless they do exist from God's point of view in eternity. Therefore, He knows them as existents, though they do not exist any longer or yet for us.

Thomas's reply seems to be shaped by his exposition of how God knows future contingents in His timeless eternity, for, as we saw earlier, Aquinas did not in fact think that the corresponding states of affairs had to actually exist in order for a proposition about them to be true. With regard to our knowledge of non-being, Aquinas explains, "Anything existing positively outside the soul has something in itself by which it can be called true; but this is not the case with the non-existence of a thing: whatever truth is attributed to it comes from the intellect."⁴⁶ That is to say, things contain universal forms which the intellect may abstract from the sense impression it has of the things, but since non-being has no such intelligible form the only truth about it is in the intellect alone, not in the object. Now, Aquinas reasons, "Since the future as such is not, and the past as such is not, the same reasoning holds for the truth of the past and future as for the truth of non-being."⁴⁷ The point is that with regard to future events, the truth about them resides in the intellect alone rather than in the objects themselves, which do not, insofar as they are future (*in quantum est futurum*), exist. On this analysis, the future contingents need not be conceived as in any sense existing (though that is not excluded); it is enough for the truth value of future contingent singular propositions that the states of affairs described *will* some day obtain. On Thomas's analysis in his immediate reply to the objection, however, future things must be conceived, it appears, as in some sense existent—but more of this later.

Thomas answers the third objection by employing the medieval distinction between necessity *de re* (applied to the thing referred to) and *de dicto* (applied to the proposition).⁴⁸ The proposition "Whatever is known by God must necessarily be" is, if understood *de re*, false. For in this case, one may substitute for the words "whatever is known by God" any arbitrarily chosen subject, for example, "Socrates's sitting down" and thus obtain "Socrates's sitting down must necessarily be," which is false. Understood *de dicto*, however, the proposition is true: "Necessarily, whatever is known by God exists." Here the modal operator governs the whole *dictum* and correctly indicates that "Whatever is known by God exists" is a necessarily true proposition. This is not fatalistic, however, for the things known by God may be contingent. Hence, it does not follow that if God knows something to exist, it exists necessarily.

To answer the fourth objection, Aquinas employs both another medieval distinction as well as an Aristotelian axiom. In the first place, one must distinguish between the necessity of the consequence (*necessitas*

consequentiae) and the necessity of the consequent (*necessitas consequentis*).⁴⁹ The impossibility of Socrates's sitting is predicated on the prior assumption that he *is* (tenselessly) not sitting at the time in question. But in this case the necessity of his sitting is the necessity of the entire hypothetical: "Necessarily, if he is seen by God to be sitting, he is sitting." But the consequent itself is not necessary. Socrates may sit or stand, but necessarily if he is seen to do *x*, then he is doing *x*. If the hypothetical statement is put into categorical form, "Whatever is seen to be sitting must necessarily be sitting," then once again the proposition is false *de re*, but true *de dicto*, as we saw above. But there is another answer to this objection.⁵⁰ In God's eternity Socrates's sitting down is present to God. But, as Aristotle put it, "Whatever is, necessarily is, when it is." Hence, since Socrates's sitting down is present to God, it is in this Aristotelian sense necessary. From God's perspective it is actualized, unpreventable, and immutable. In this sense it is indeed impossible for Socrates to refrain from sitting down because he *is* sitting down. But this does not remove the contingency of the event, anymore than my observation of a present event removes its contingency, for God merely "sees" what Socrates is freely doing. He does not know in advance what Socrates will do; He merely knows what Socrates is doing at any point in the temporal series, which in its entirety is present to God in eternity.

The final objection, based on the fact of God's past foreknowledge of future events, received more extensive treatment by Aquinas.⁵¹ Some, he notes, have attempted to turn back the force of the reasoning by arguing that the antecedent, "God knew this future contingent event," is not necessarily true because it contains an implicit reference to the future, which is contingent.⁵² Thus, "God foreknew that Socrates will sit down" is a contingent statement, since Socrates's action is still outstanding and if he does not sit down, then it will turn out that God did not foreknow this after all. Therefore, although the act of God's knowledge is in the past, it is, so long as the object of knowledge is yet in potency, contingent whether that act was indeed knowledge. Thomas's reaction to this argument is very puzzling:

This argument, however, is invalid; for when one says, 'This is future,' one designates the ordination of the causes of that thing to its production. Now although it is possible that the causes ordained to a certain effect can be impeded in such a way that the effect will not follow from them, it is not possible to prevent their having been at some time ordained to produce this effect. Hence, even if that which is future should be able not to happen in the future, it will never be able at any time not to have been a future.⁵³

There seem to be several incongruities in this response. First, the designation of some event as future is surely not the same as designating

the chain of causes leading to that event. The event could theoretically lack any prior proximate cause. The context suggests that Aquinas may be recalling Aristotle's point in *De generatione et corruptione* that an event which will be, as opposed to one which is going to be, is causally linked to the present. But it seems inappropriate to import that notion here, for one who asserts the truth of a future-tense proposition need not be committed to that thesis. Besides, Aquinas does not seem to have Aristotle's distinction in mind, for he speaks freely of something that was future not happening in the future; clearly to be future is not therefore to be necessary, as it was for Aristotle. Second, the fact that causes *were* ordered to a certain effect, even if that effect did not eventuate, seems irrelevant. This merely underlines the contingency of the effect. It is to say that the counterfactual is true: "The effect would have occurred, had not *x* impeded it." But this seems uninteresting as far as fatalism goes. Third, again the fact that an event does not happen in the future, even though it is always the case that it was going to happen, is beside the point. The point is that because the event may not occur, a prediction concerning it is contingently true or false. Note that Aquinas here treats the future as something changeable. The event was future, but due to impeding obstacles is no longer future. Hence, he reasons, the proposition "God foreknew *x*" must be temporally necessary, apparently because when God foreknew it it was future, though in the end it did not pan out. The fact that this proposition has an implicit future reference "does not take away its necessity; because what had in fact a reference to a future event must have had it, even though the future is sometimes not realized."⁵⁴ So the proposition is necessary, and thus, in Thomas's opinion the fatalist objection goes through.

Some other theologians, however, attempted to refute the argument by claiming that the antecedent was not necessary because, although God's knowledge is necessary, what is known by Him is contingent.⁵⁵ Hence, though whatever God knows He knows necessarily, nevertheless what He knows may be a contingent proposition. Therefore, the proposition "God foreknew *x*" is contingent. Aquinas, however, finds this argument, too, deficient. For the truth of a proposition is not affected by the necessity or contingency of what is asserted materially in the proposition. Only the principal composition of a proposition determines its truth. Aquinas's point seems to be that in contexts expressing propositional attitudes, the concerns of what is believed, known, asserted, and so forth is irrelevant to the truth value and hence to the modality of the propositions.⁵⁶ "Hence, the same character of necessity and contingency is found in each of the following: 'I think that man is an animal' and 'I think that Socrates is running.'"⁵⁷ In the proposition, "God foreknew *x*"

the contingency of event x is irrelevant to the necessity that attaches to this proposition in virtue of its being in the past tense. Nothing can change the fact that God foreknew x , regardless of x 's contingency.

Finally, other thinkers concede that the antecedent is necessary, but deny that the consequent is equally necessary unless it is causally determined by the antecedent as by a proximate cause.⁵⁸ If the antecedent is only the remote cause, the necessity of the effect can be impeded by a proximate cause. But Thomas rightly criticizes this argument for assimilating logical to causal necessity. "...It is not due to the nature of the cause and effect that a necessary consequence follows from a necessary antecedent, but rather to the relation that the consequent has to its antecedent."⁵⁹ It is logically impossible for the contradictory of the consequent to follow from the antecedent. According to Aquinas, in any true conditional the consequent must be necessary if the antecedent is necessary. In fact, unless he is speaking of strict implication, Thomas is incorrect in this; from $\Box p$ it follows that $\Box q$ only if $\Box (p \supset q)$. But Aquinas would certainly hold the conditional "If God foreknew x will happen, then x will happen" to be necessarily true. The argument therefore may be so schematized and is in Aquinas's view valid. The curious feature of this argument is that whereas the modal operator on the conditional conveys logical necessity, the modal necessity of the antecedent is temporal necessity. We thus have an argument in which two premisses, both necessary but in different senses, are said to yield a conclusion that is also necessary. Is this a valid procedure? And in what sense can the conclusion be said to be necessary? If we say the necessity attaching to the conclusion is simply logical, then what role have we allowed for the temporal necessity attaching to the first premiss? On the other hand, the necessity attaching to the conclusion does not appear to be temporal necessity, since the state of affairs of which it speaks does not yet obtain at the time at which the argument is made. Unfortunately, Aquinas is either silent or unclear on these questions.⁶⁰

He proposes instead a different solution to the difficulty. When the antecedent refers to a mental act, the consequent is to be understood, not insofar as it refers to the independently existing object, but rather insofar as it refers to the mental act. For example, in the proposition "Whatever the mind knows is immaterial," the word "immaterial" is to be taken in reference to the objects of thought, not the independently existing objects. Similarly in the proposition "If God knew something, it will happen" the consequent should be taken in reference to the divine knowledge. In that respect, the event in question is not future, but present to God. Hence, it is more technically correct to say, "If God knows something, it is."⁶¹ In effect, Aquinas is in a rather contrived way simply

asserting that the antecedent of the objection is false. God foreknows nothing. But Aquinas does not wish to flatly deny God's foreknowledge, but rather to give an account of it. Hence, he reinterprets it in terms of divine eternity. It might be objected that even in the technically correct conditional, the antecedent "God knows something" is still temporally necessary, since it is present-tensed, and the present is as necessary as the past. Hence, the consequent is also still necessary. This Aquinas concedes. He explains that when we say that God knows/knew some future event, we assume a time lag between the knowledge and the event. But with regard to divine knowledge, there is no future. Hence, there is no question of something known by God failing to eventuate. "For that which already is cannot, with respect to that moment of time, not be."⁶² Hence, the consequent has the same necessity as the antecedent, for that which is, when it is, necessarily is.⁶³ But, as we have seen, Aquinas did not regard the temporal necessity of the present as incompatible with contingency. The proposition "If I know something, it is" is also true and the antecedent temporally necessary; therefore the consequent is also temporally necessary—but who would say this removes contingency? The point seems to be that such knowledge does not precede the event in question and cannot therefore prejudice its occurrence. So long as the knowledge and the event are simultaneous, fatalism cannot arise.

Summary

In summary, then, Thomas has appealed exclusively to the tradition of God's timelessness in order to de-fuse the threat of fatalism. That threat arises, not from the fore-truth of future-tense propositions, which Aquinas grants, but from foreknowledge of such propositions, since such knowledge is a fact of the past and hence cannot be changed. If God foreknew future contingent singular propositions, then since His knowledge is infallible, fatalism would follow. But since many future events are indeterminate or in potency to either occurring or not occurring, propositions about those events cannot be infallibly foreknown to be true or false. A temporal God, therefore, could not foreknow the future. Since God is, however, timeless, He transcends the whole temporal series. All the events which occur successively in time are present to Him. By His knowledge of vision, He apprehends the entire temporal series timelessly. Therefore, He timelessly knows what is future for us. Although what is present to God timelessly and known by Him is necessary—since what is actually present cannot be made to have not been present at that moment—, this necessity is not fatalistic because God's knowledge is not prior to, but simultaneous with, each event and He observes it as

happening without thereby canceling its contingency *vis à vis* its proximate causes.

THOMAS'S IMPLIED THEORY OF TIME

Having explicated Thomas's response to the challenge of fatalism, I should now like to direct our attention more closely to the theory of time involved in his solution. We have seen that Aquinas uses the metaphor of vision to characterize God's knowledge of the actual world. In the same connection he also employs the metaphor of things' being present to God in His eternity. He illustrates this presence by means of a circle, whose center is "simultaneous" with every point on its circumference. We saw that were it not for this presence of the entire temporal series before God, He could have no knowledge of the future. The principal reason for this appeared to lie in the impossibility of inferring future events infallibly from present causes. All this seems to imply that the metaphors of vision and of presence are meant to express the fact that God does not know by means of inference from present states of affairs those propositions to be true that He does know; rather all the states of the actual world—past, present, and future—are equally real to Him. Thus, the presence of all events to God does not seem to be merely epistemic; rather Aquinas's understanding of foreknowledge seems to require that the past and future be ontologically on a par with presently existing reality. In several statements, Thomas says as much. In the *Summa contra gentiles* he speaks of the being which future things possess:

The contingent is in its cause in such a way that it can both be and not-be from it; but the necessary can only be from its cause. But according to the way both of them are in themselves, they do not differ as to being, upon which the true is founded. For, according as it is in itself, the contingent cannot be and not-be, it can only be, even though in the future it can not-be....

... We cannot say that this is known by God as non-existent, so as to leave room for the question whether it can not-be; rather it will be said to be known by God in such a way that it is seen by Him already in its own existence. On this basis there is no room for the preceding question. For that which already is cannot, with respect to that moment of time, not-be.⁶⁴

Here Thomas claims that considered in abstraction from their proximate causes, the contingent and the necessary do not differ in their being. The contingent, like the necessary, cannot be and not-be, but only be. This might be taken to mean that when the contingent comes to exist, it cannot be and not-be; but this does not imply that it *is*. But Aquinas did seem to think that future contingents *have* being: "For of the things that for us are not yet God sees not only the being that they have in their

causes, but also the being that they have in themselves, in so far as His eternity is present in its indivisibility to all time.”⁶⁵ Moreover, Thomas proceeds to say that God sees a contingent event, future for us, *already in its own existence* (*iam in sua existentia*). This is remarkable language; for while we might expect Thomas to say that such an event does not yet exist, here he asserts that it in some sense already exists. The suggestion seems to be that future contingents exist in themselves and so are known by God and cannot be otherwise, though they are not necessitated by their proximate causes and are thus future and indeterminate to us in the temporal series.

Again in the *Summa theologiae* he appears to deny that the presence of all things to God is merely epistemic:

...God knows all contingent events not only as they are in their causes but also as each of them is in actual existence in itself.

Now although contingent events come into actual existence successively, God does not, as we do, know them in their actual existence successively, but all at once; because his knowledge is measured by eternity, as is also his existence; and eternity, which exists as a simultaneous whole, takes in the whole of time.... Hence all that takes place in time is eternally present to God, not merely, as some hold,⁷ in the sense that he has the intelligible natures of things present in himself, but because he eternally surveys all things as they are in their presence to him.

⁷ Avicenna and his followers....⁶⁶

Thomas appears here to wish to hold on the one hand that events are actualized successively and on the other that they are timelessly present to God. He states that God knows *all* contingent events (presumably therefore future contingents) as each of them in itself is in actual existence. The “as” (*prout*) is not here temporal, as if to say He knows them as they successively occur. Rather God knows them according as they are in actual existence. But if, as he says, contingent events come into actual existence successively, then how can God fail to know them successively in their actual existence? The answer is that all the events are present eternally to God. Aquinas emphasizes that this is not merely so in that the essences (*rationes*) of things are comprehended in the divine essence; rather God eternally surveys all things according to their presence to Him. The point here seems to be that this presence is not internal to God, but a real external presence. Since God knows contingents according to their actual existence, it seems undeniable that for God future contingents actually exist. This does not mean that such events always exist, for on this view that would be to exist throughout all time, which they do not.⁶⁷ But the entire temporal series would seem to exist timelessly, on the analogy of a spatial extension, and as such is known by God.

Finally, in his *Compendium theologiae*, Thomas seems to ascribe actual existence to future contingents before they come into being temporally:

Even before they come into being, He sees them as they actually exist, and not merely as they will be in the future and to know some future things. Contingent things, regarded as virtually present in their causes with a claim to future existence, are not sufficiently determinate to admit of certain knowledge about them; but, regarded as actually possessing existence, they are determinate, and hence certain knowledge is possible.... For His eternity is in present contact with the whole course of time, and even passes beyond time. We may fancy that God knows the flight of time in His eternity, in the way that a person standing on top of a watchtower embraces in a single glance a whole caravan of passing travellers.⁶⁸

In this remarkable passage, Aquinas states that God sees future contingents in their actual existence (*prout sunt actu in suo esse*) before they come to be (*fiant*). Here becoming and being are contrasted in such a way as to suggest that from God's perspective the whole time-line has being timelessly, but from our perspective on the time-line, things come to be successively. In this way God's eternity is in present contact with the whole course of time and transcends it. While not experiencing the flux of time, still He knows it: the temporal process is apprehended by Him on the spatial analogy of the man who at once sees all the passers-by on the road below him. Because God knows the whole temporal series as it is (timelessly), He knows the events, contingent in their causes, as already determined to one alternative (*iam...determinata ad unum*). Thus, His knowledge is certain.

Therefore, what Aquinas's doctrine of God's eternity and knowledge of future contingents was seen to imply seems to be positively affirmed by Aquinas, namely, that the past, present, and future are all ontologically on a par with each other. Accordingly, Thomas held to what contemporary philosophers of space and time call a B-theory of time. Nevertheless, I find it inconceivable that he consciously adhered to such a theory of time. For him becoming was not mind-dependent, but real, and it was only because of God's eternal being that all things were present to Him.⁶⁹ Aquinas seemed to hold both to a dynamical view of time and to the actual existence of all temporal things for God in eternity. Despite this, however, I must admit that I can only make sense of Aquinas's position on God's foreknowledge and future contingents by interpreting him as proponent of the B-theory of time.⁷⁰

GOD'S KNOWLEDGE OF ALL THINGS THROUGH HIS ESSENCE

The picture I have presented thus far of Aquinas's view of God's knowledge of future contingents would, however, be misleading if it were

taken to imply that for Thomas God has direct knowledge of the created order. In fact, Aquinas believes that God has no direct knowledge of anything other than Himself.⁷¹ Aristotle argued that God knows only the best and, hence, He knows only Himself. Thomas agrees and adds that as pure actuality God's act of knowledge cannot be actuated by anything other than His own substance. Otherwise the divine intellect would stand in relation to that thing as potency to actuality, for the thing known would bring about God's act of knowledge. Hence, the only immediate object of God's act of knowledge is His own essence. His essence serves as the intelligible species whereby He conceives Himself. When human intellects know objects, the active intellect abstracts from the sense impressions received through the bodily organs the universal essence or intelligible species embodied in the particular. The passive intellect in turn receives these universal forms, which constitutes knowledge. But since God is simple and pure actuality, such distinctions do not exist in Him. Rather in God the intellect, the object of knowledge (Himself), the means of knowledge (intelligible species), and the act of knowledge are entirely one and the same. God's act of knowing is itself a self-subsistent knowing of itself. Hence, Aquinas often asserts that God knows himself through Himself. Thomas recognizes that our finite intellect cannot comprehend how in God knowledge and essence—and indeed all the other divine attributes—are not distinct; but he insists that all these are perfectly united in God as all the properties of numbers pre-exist in unity, and our multiple conceptions of the divine essence are imperfect images of the one, simple essence of God. But Aquinas differs sharply with Aristotle concerning God's knowledge of the universe. Since the Christian God, unlike the Unmoved Mover, is the Creator of the world, the world stands to God as effect to cause. This constitutes the crucial watershed between Aristotle and Aquinas on this score, for God, in knowing Himself, knows His power and the effects to which that power extends. In knowing Himself as the First Cause of everything that exists, God knows all His effects. Thus, God knows Himself through Himself and all created things through Himself. Not does He know created things merely as universal essences, which imitate His own essence; as the existential cause of every singular, God in knowing Himself as First Cause knows every singular effect produced by Him. As Aquinas puts it, God's knowledge has the same extension in this regard as His causality. Therefore, although the divine essence is the only direct object of the divine knowledge, nevertheless God possesses indirect knowledge of all other existents.

Now it is perplexing how this understanding of God's knowledge is related to God's knowledge of future contingents as explained by

Aquinas. We have seen that God's knowledge of vision seems to entail the actual existence of the temporal series of events as the proper object of God's knowledge. But in the context of the doctrine of God's simplicity and pure actuality, it seems that the eternal divine essence, not the temporal series of events, is the proper object of God's knowledge. This impression seems confirmed when we consider that Aquinas affirmed the Augustinian doctrine of the divine exemplar ideas.⁷² According to Thomas, the divine ideas serve two purposes: (1) to be the pattern for God's practical knowledge for those created things which have the ideas as their forms, and (2) to be for God's speculative knowledge the principle of knowing a thing in its intelligible nature. Thomas maintains that such plurality is not incompatible with divine simplicity, since the plurality of ideas is the object of God's knowledge, not the means of His knowledge, which is the divine essence as the simple intelligible species. What God knows may be in itself complex, but God's act of knowledge is simple. In effect, what Aquinas seems to have done is simply to have substituted a mental realm of particulars for the physical realm of particulars as the objects of God's knowledge. One therefore is led to ask why the presence of all things to God in His eternity might not be construed to mean the presence to God of the divine ideas. In this way Aquinas would not seem committed to the ontological parity of the past, present, and future. The events themselves are not present to God, but only their exemplar ideas. In His eternity God sees the ideal archetypal world and so timelessly understands the truth about past, present, and future events in the temporal series, which is in a state of genuine becoming. But while one might wish to re-interpret the Thomistic doctrine in this way, one cannot plausibly claim that this represents Aquinas's own view. In his discussion of God's knowledge of future contingents, he always speaks of the things or events themselves, never of their exemplar ideas. Indeed, this Augustinian doctrine seems to fit ill with Thomas's view of God's immediate and simple knowledge of Himself. But if God's essence is the object of His knowing, then why, one might yet demand, must the events themselves be actual to God in His eternity? Is it not enough that He merely know Himself insofar as He is the cause of all particulars which do obtain? The answer would seem to be yes; but He knows Himself as the cause of the particulars that do obtain precisely because they *do* obtain. If they did not actually obtain, God could not know Himself as their cause. It might be thought that it would be sufficient that they *will* obtain in order to yield such knowledge. But we have seen that given Aquinas's understanding of foreknowledge, this is not the case. Unless the particular actually obtains, God cannot know Himself timelessly as its cause because prior to its actual existence there is no way

by which one may infallibly infer the truth of the propositions "This particular will exist." It might be said that God knows Himself timelessly as the cause of the particular, though the particular does not come to exist until later in the course of the temporal process.⁷³ But so to speak is to place God Himself in time; what this really means is God knows Himself timelessly as the cause of a particular which lies timelessly on the timeline at a point after some prior designated point. But all points are ontologically on a par for God. Hence, the fact that God knows His own essence immediately and the actual world only indirectly through that essence as its cause does not obviate the need that the world actually exist for God in eternity. To return to the metaphor, the temporal series must be present to God if He is to have His knowledge of vision of it.

GOD'S KNOWLEDGE AS THE CAUSE OF THINGS

One final issue deserves to be mentioned that threatens to undermine Thomas's attempt to preserve contingency in the face of divine knowledge. This is his doctrine that God's knowledge is the cause of its objects rather than the objects' being the cause of God's knowledge.⁷⁴ Origen had said, "A thing will not happen in the future because God knows it will happen, but because it is going to happen, therefore it is known by God before it does happen."⁷⁵ But Thomas disagrees, contrasting in this respect human and divine knowledge:

...the knowledge of the human intellect is in a manner caused by things. Hence it is that knowable things are the measure of human knowledge; for something that is judged to be so by the intellect is true because it is so in reality, and not conversely. But the divine intellect through its knowledge is the cause of things. Hence, its knowledge is the measure of things.... The divine intellect, therefore, is related to things as things are related to the human intellect.⁷⁶

Here Aquinas appears to maintain that a human judgement is true because it corresponds to what is the case in reality; reality is not as it is because a judgement is true. As he says elsewhere, the truth of our propositions (*enuntiabilia*) is not the cause of the existence of things, but *vice versa*.⁷⁷ Now if this is also the case for God, Origen reasons, then for any given time the state of affairs which contingently obtains at that time determines the truth values of the corresponding propositions and thus the content of God's knowledge. But Aquinas repudiates this position, contending that precisely the opposite is true. Because God knows certain things to be true, reality therefore conforms to God's knowledge so that we can say that God's knowledge is the cause of things. The reason for this reversal with regard to divine knowledge is that the temporal cannot cause the eternal:

...either the knowledge is the cause of the thing known, or the thing known is the cause of the knowledge, or both are caused by one cause. It cannot be said, however, that what is known by God is the cause of His knowledge; for things are temporal and His knowledge is eternal, and what is temporal cannot be the cause of anything eternal. Similarly it cannot be said that both are caused by one cause, because there can be nothing caused in God, seeing that He is whatever He has. Hence, there is left only one possibility: His knowledge is the cause of things.⁷⁸

Actually both reasons given here could be directed against God's knowledge being caused by things: His intellect would be in potency to those things and the eternal would be caused by the temporal. Aquinas does not explain why God's eternal knowledge could not be caused by something temporal. It is difficult to see why such a causal relation could not obtain, when one recalls that all temporal things are present to God in His eternity. In any case, Aquinas seems to hold that God's knowledge causes the objects of His knowledge. In reply to Origen, he states,

His saying that God foreknows certain things because they are going to happen, is to be understood of the causality of logical consequence, not of the causality which produces existence. For it follows logically that if certain things are going to happen, God foreknows them; but the things that are going to happen are not themselves the cause of God's knowledge.⁷⁹

His point seems to be that while it is true that from "x is going to happen" it follows that "God foreknows x," this does not mean x is the efficient cause of God's foreknowledge. Origen could certainly agree to this. But Origen meant more than logical entailment holds between these two propositions; otherwise, nothing is proved, since it is equally the case that the former may be derived from the latter. Origen meant that God's foreknowledge of the event is dependent upon the obtaining of the event itself, not *vice versa*. Of course, Aquinas is bending over backwards to be charitable here; still the point seems to remain that in Thomas's opinion, while "x is going to happen" and "God foreknows x" mutually entail each other, nevertheless God's knowledge is the *causa essendi* of the things that are going to happen.

Now this doctrine seems nearly unintelligible. For what does it mean to say God's knowledge is the cause of some thing? Does this mean God knows certain propositions to be true and His knowing them to be true causes the corresponding states of affairs to obtain in reality? If so, what makes the propositions true to begin with? How can God know them to be true unless they correspond with reality so as to be true? And how can knowing a proposition to be true be the existential cause of the corresponding state of affairs? Aquinas's answers to such questions are not at all clear. He would agree that truth is conformity between the intellect

and the thing known.⁸⁰ The intellect knows truth when it judges that there is a correspondence between the mental form of a thing in the intellect and the thing itself. Aquinas would agree that a proposition formed in the intellect has truth insofar as it corresponds with reality.⁸¹ But God does not form propositions in His intellect, since it is fully actual and simple and does not therefore make judgements by compounding and dividing subjects and predicates.⁸² Nevertheless, He knows the truth of all possible propositions by His knowledge of simple understanding. For in fully comprehending the essence of a thing He grasps all possible predications that would be true of it. Hence, by knowing His own essence, He knows the essences of all things, and in knowing them He knows all possible propositions that could be truly enunciated of them. Since His being is identical with His act of knowledge, in knowing possibles He confers being upon them. But if His knowledge is the cause of things, then—*per impossibile*—should not all possible states of affairs obtain? Thomas here qualifies his position to maintain that God's knowledge is the cause of what exists only insofar as His will agrees to the positing of certain possibles in reality:

...an intelligible form does not indicate a principle of activity merely as it is in the knower, unless it is accompanied by an inclination towards producing an effect; this is supplied by the will. A knowledge-form is indifferent to opposite courses, since one and the same knowledge covers contraries.... Now it is clear that God causes things through his intellect, since his existence is his act of knowing. His knowledge, therefore, must be the cause of things when regarded in conjunction with his will. Hence God's knowledge as the cause of things has come to be called the "knowledge of approbation."⁸³

Now this changes the picture considerably. It is no longer the case God's knowledge is the cause of things *simpliciter*. Rather His knowledge comprehends possibles and their opposites alike, and His will selects the possibles to be actualized. So it is only His *scientia approbationis* that is the existential cause of things. But this no longer seems to be necessarily opposed to the account Aquinas gives of human knowledge. To use his own example, an artist executes a painting based on his prior idea of what he wishes to portray. Similarly God creates certain creatures on the basis of the intelligible forms He wishes to instantiate. But this sounds merely like the doctrine of creation according to exemplar ideas. God knows every conceivable way in which the divine essence could be imitated. Those exemplifications His will selects are created by Him. But this seems in no way inherently opposed to the Origenist view that God's knowledge of the actual world depends on what actually exists. Just as the artist created the painting on the pattern of his exemplar idea and yet

knows the truth of the proposition "This painting portrays an idyllic English countryside" because that is in fact what the painting portrays, so God creates the actual world after His archetypal ideas and yet knows the truth of the proposition "The universe contains n hydrogen atoms" precisely because it does contain that quantity of hydrogen atoms. Of course, the world does contain exactly so many hydrogen atoms because God so wills, but this does not obviate the fact that " n hydrogen atoms exist" is true because n hydrogen atoms do exist. Since God knows all true propositions, He knows the truth of " n hydrogen atoms exist." Thus, it seems that it is more correctly God's will that causes the existence of things rather than God's knowledge. Indeed, on Aquinas's analysis there seem to be three moments in God's knowledge: (1) *scientia simplicis intelligentiae* of all possibles, (2) *scientia approbationis* by which the will selects which possibles shall obtain, and (3) *scientia visionis* or God's knowledge of the actual world based upon what obtains. Moments (1) and (2) seem closely related to God's *scientia speculativa* and *scientia practica* respectively. For in the first moment He considers all possible things wholly apart from the intention to create, where in the second He selects some things with the intention to bring them into existence. (Again, this raises the question why this knowledge is not sufficient for God's foreknowledge of future contingents.) Aquinas's response to Origen would, in this light, be seen to be the claim that what will be in the future will be because God has the intention to create it according to the selection of His will. In this peculiar sense His knowledge causes what He knows. But Origen, of course, was speaking of (3) knowledge of vision, not of (2) the selection of divine will. Knowledge of vision is, it seems, conditioned by what actually exists. In this sense, God knows what will happen because it will in fact happen, not *vice versa*. Of course, insofar as God has selected to instantiate certain possibles, those possibles will be because God "knows" they will be—"knows" in the sense of "chooses." Aquinas's position thus seems to amount to the assertion that God does not choose what will be because they will be, but He by His choice determines everything that will be.

Now the question which arises in relation to this doctrine of Aquinas is whether it does not entail consequences as fatalistic, or rather deterministic, as those he sought to avoid. For if God's knowledge is the cause of its objects, how then is divine determinism to be avoided? For Thomas maintains that among the things known by God are the motions of the human will.⁸⁴ He argues that since God knows His own essence as the First Cause of every thing to which His causality extends, He knows the operations of the human intellect and will. Yet Aquinas insists that the power of the will to will or not-will is not removed by being under the

influence of the higher divine cause which is the source of its existence and operation. One wonders whether Thomas means merely that the power of choice and the being of the will come from God, but not the actual decisions of the will. The answer to this is clear: God causes not only the power of the will but also the motion of the will.⁸⁵ It is again Origen who is the target of Thomas's opposition on this matter. Aquinas maintains that "... God is for us the cause not only of our will, but also of our act of willing.... every movement of the will must be caused by the first will, which is the will of God."⁸⁶ Again, "...acts of choice and movements of the will are controlled immediately by God."⁸⁷

At the same time, Thomas doggedly insists that God's knowing and determining the choices of the will does not remove the contingency of those choices.⁸⁸ In the first place, whatever God wills must be so, but only with the necessity of supposition (*necessitas suppositionis*).⁸⁹ That is to say, given that something is willed by God, then, necessarily, it will be so. But it is not absolutely necessary in itself, since God could have willed the opposite. Hence, the proposition "If God wills something, it will be" is necessarily true; but the consequent is not in itself necessary.

But this move, analogous to the distinction between *necessitas consequentiae* and *consequentis* in the fatalism dispute, does not seem to work so well in this context. For now the necessity at issue is causal, not logical. While God did not have to will what He wills, nevertheless now that He has done so, it is causally determined that what He willed take place. Hence, if God in eternity wills that the proposition "Socrates is sitting" be true at t_n , then it is causally determined by His *scientia approbationis* that Socrates sit at t_n . Granted that Socrates's sitting is not logically necessary, still it is causally necessary. Secondly, Aquinas argues, God wills that some events occur contingently. Therefore, they must occur contingently.⁹⁰ But again, this Augustinian inspired argument does not seem to work well when causal necessity is involved. For God does not on this account simply foreknow an event to take place as it does. It is God in His eternity who determines which possible motion of the will shall be actualized, and in so knowing it He causes it. Thus, the event is not contingent *vis à vis* God. But a closer reading of Aquinas reveals that it is not his claim that events are contingent in relation to God.⁹¹ The event is, indeed, causally determined with regard to God; to say it is contingent means that it is not causally determined by its *proximate* causes in the temporal series. But this seems entirely irrelevant; for the event, whatever its relation to its proximate causes, is still causally determined to occur by the divine *scientia approbationis*. Worse still, Thomas seems to have forgotten that those secondary causes are themselves also similarly determined, so that even on this level contingency seems squeezed out.

Thus, it is futile for him to contend that God's knowledge does not necessitate an effect because the effect may be impeded by its secondary cause, for this secondary cause is itself determined causally by God.

Therefore, it seems to me that having sought to escape the clutches of theological fatalism, Aquinas flees into the arms of divine determinism.⁹² In maintaining that God's knowledge is the cause of everything God knows, Thomas transforms the universe into a nexus which, though freely chosen by God, is causally determined from above, thus eliminating human freedom.

CHAPTER FIVE

JOHN DUNS SCOTUS

John Duns Scotus's best treatment of the issue of God's foreknowledge and future contingents is found in distinctions 38.2-39 of book one of his *Opus oxoniense*, or *Ordinatio*, in which he discusses whether God has determinate, certain and infallible, immutable, and necessary cognition of existents and whether such knowledge is compatible with contingency in things.¹ We may leave aside the question of the immutability of God's knowledge, but the other questions are important for an understanding of Scotus's view on God's knowledge of future contingents and the problem of theological fatalism. Although Scotus presents a string of objections to be dealt with at the outset of his inquiry, I think his own position will be clearer if we do not follow his procedure, but rather first examine his own view on the matters at hand and then with that in mind see how he deals with the objector's arguments.

SCOTUS'S POSITION ON GOD'S KNOWLEDGE

In elaborating his own view of God's knowledge, Scotus is at pains to set it apart from the positions of various of his predecessors. Thus, he considers and rejects three previous opinions concerning the nature of God's knowledge of existents.

Rejection of Previous Opinions

First Opinion

The first opinion holds that the divine knowledge of all things is certain because of the ideas which exist in the divine intellect which serve as the perfect exemplars for their representations.² This is evidently the Neo-Platonic-Augustinian model for God's cognition of particulars. Against this theory Scotus lodges four objections. (1) Cognition of divine ideas would furnish no knowledge of contingent propositions. In knowing the archetypal ideas of particulars, God knows at most the essential properties of any particular. But such knowledge would suffice only for the knowledge of propositions in which knowledge of the subject term entailed knowledge of the predicate term, in other words, analytic statements. As Scotus explains in the *Reportatio maior*, for the knowledge

of a proposition like "Peter will receive eternal blessedness," it is not enough to have knowledge of the exemplar ideas of "Peter" and "eternal blessedness." If it were, not only would such a proposition be necessary rather than contingent, but it would also be "an immediate and first principle."³ The reasoning here is apparently that all truths would be necessary and eternal truths, constituted as such in virtue of the divine essence, on a par with logical principles such as the Law of Contradiction. In this case, no other logically possible worlds exist. (2) The same point can be made in another way. The divine ideas exist in God's intellect prior to every act of the divine will, since they are in no way there in virtue of the divine will. They are thus naturally prior to the divine will. For Scotus whatever is in accord with the nature or essence of a thing is said to be "natural." By this "natural priority" Scotus thus apparently means logical priority, since God is timeless and simple, thereby precluding temporal and causal relations. His point is that the essences of things do not exist in God's mind in virtue of His will that they exist—God does not choose the possibles—, rather they are an inherent part of the divine intellect. Thus, it might be said that the possibles, since they exist prior to the divine will, are necessarily possible.⁴ Now God either knows each of these ideas in itself or in the form of propositions. If the latter, then all propositions are necessary, since they are cognized by God naturally in the divine essence, which cannot be otherwise. If the former, then God has no knowledge of contingent propositions, as we have seen. If it be said He knows them both ways, then He would know contradictories to be simultaneously true and, hence, He knows nothing. The reasoning here seems to be that God would have to know all possible propositions to be true, perhaps because in knowing the ideas in themselves He knows them as predicable in various possible ways, and in knowing them in the context of propositions He must know all possible propositions in which the ideas can possibly play a part. Hence, we are led to self-contradiction in the divine intellect. (3) The distinction between pure possibles and future existents would be obliterated. Since future things, like pure possibles, do not actually exist, the only difference between the two is the divine will, which intends future things to exist from among the possibles. But since the divine ideas are naturally prior to the divine will, the ideas of future existents differ in no way from the ideas of merely possible things. This would eliminate God's foreknowledge of the actual world. (4) The idea of a future existent will also fail to determine when the thing exists as present. Since the idea of the thing leaves indeterminate when the thing exists, it would be impossible for God to know when the thing "now" exists, even if He knew it to exist in the future. These last two objections

give indications that Scotus is presupposing a theory of time very different from that implied by Thomas Aquinas, as will become even more evident in his discussion of the second opinion. Schwamm notes that as a result of Scotus's rejection of the first opinion, the doctrine of the divine ideas as the means of God's foreknowledge found more opponents than defenders in the ensuing years.⁵

Second Opinion

The second opinion holds that God has certain knowledge of future contingents because the whole flux of time and all things that are in time are present to Him in eternity. Scotus's target here is obviously Aquinas, among others. He considers some of the proofs and illustrations often given of this opinion. For example, it is said that eternity is immense and infinite; therefore, just as what is immense is simultaneously present to every place, so what is eternal is simultaneously present to every time.⁶ This is confirmed by the fact that the "now" of eternity, insofar as it co-exists with the "now" of time, exceeds it; but it could not exceed it unless it simultaneously co-exists with another temporal "now". Another confirmation comes from the fact that if the whole of time could exist "independently" of the mind, the "now" of eternity would be simultaneously present to the whole of time. Now although it is impossible for the whole of time to exist simultaneously because of "the succession of time," this in no way affects eternity: it is still true that "...eternity is now equally present to the whole of time and to whatever exists in time."⁷ This argument is interesting because it shows what close affinities the doctrine of God's eternity has to the thesis of the mind-dependence of becoming. For although succession is affirmed of time, this seems to be mind-dependent: the whole of time cannot exist simultaneously because this would mean that t_1 , t_2 , and t_3 are all present, which is absurd; nevertheless, eternity is *timelessly* present to all moments. This presence of eternity to the whole of time is illustrated, Scotus explains, by means of a circle's center and circumference. Flowing time is the circumference and eternity the center. Similarly, all the "now's" of time are present to the "now" of eternity. Because of this presence, God knows all things because He sees them in the way in which I see things that exist in my present.

Scotus rejects this account of God's knowledge of existents primarily, I think, because he assumes a radically different view of time than that which seems to be implied in the arguments of God's timeless presence to all things. (1.) Scotus first seeks to turn the tables concerning the notion of immensity. Suppose, he says, that just as time is in continuous

flux, so God were to continuously enlarge place in the process to infinity. Duns here contemplates a finite universe which expands with time toward infinity as a limit. In such a case, God's immensity would not be the property of co-existing with some place at some "now" unless that place existed at that "now." For God co-exists only with what exists; although at some future time a new place not in the present universe might exist, God now co-exists only with the places that do exist. Imminence is the property of co-existing with actual place, not potential place. Therefore, by the same token, eternity would be the property of co-existing with something that actually exists. "...I grant that immensity is present to every place, but not to every actual and potential place... Thus, eternity will not, by reason of its infinity, be present to any non-existent time either."⁸ Scotus's reply presupposes that co-existence signifies a real relation and that such a relation can hold only between things which really exist.⁹ The argument from immensity would seem to lead, therefore, to the conclusion that God is eternal only in that He is everlasting and exists at every temporal "now."¹⁰ Obviously Scotus is presupposing a dynamical view of time according to which the future in no sense actually exists—hence, his emphasis on the "now" or the present. Space-time is not for him a timelessly existing "block"—future space-time positions not only do not now exist; they do not exist, period. If, therefore, it is now t_1 , the temporal moment t_3 does not exist. Hence, God cannot co-exist with it. If then His knowledge of what will happen at t_3 is based upon His co-existing with and seeing what happens at t_3 , it follows that God cannot have knowledge of future contingents.

2. Against the confirmation based on the "now" of eternity's exceeding the "now" of time, Scotus replies that the "now" of eternity is essentially infinite and in that sense exceeds the "now" of time.¹¹ But in fact it does not co-exist with another "now." On Scotus's view of time these other "now's" simply do not exist; hence, it is impossible for God to co-exist with them. That God's "now" is essentially infinite must therefore mean that it is everlasting and immutable, unlike the transitory "now" of time. The temporal "now" elapses as soon as it exists, but God's "now" abides forever. God's eternity is essentially infinite in that were any given temporal "now" to exist, God would co-exist with it. God's eternity is analogous to a potential infinite in that God will co-exist with any and all moments of time that happen to exist. Similarly, Scotus explains, God's immensity essentially exceeds the size of the universe and yet it does not in fact exist anywhere other than this universe. So God's eternity essentially exceeds the temporal "now" but does not co-exist with any other "now's" than that which is actual.

3. Therefore, with regard to the argument concerning the whole of time, Scotus grants that the eternal “now” has enough infinity to encompass the whole of time, if the whole of time existed simultaneously. But the essential infinity of God’s “now” does not imply the co-existence of all temporal “now’s” with it. For these other “now’s” are unreal, but the real relation of co-existence requires that both *relata* really exist. This reply seems to show that Scotus’s difficulty was not with the notion of God’s timeless eternity, but rather with the view of temporal becoming implicit in the argument for God’s co-existence with all times. He would probably grant that “prior” to creation, when no time existed, God’s “now” was timelessly eternal; but with the advent of time, God’s “now” co-exists only with the temporal present.

4. Scotus believes the illustration of the circle actually supports his view. For if we imagine a line with the termini *a* and *b*, such that *a* is immobile while *b* is swung around *a*, then the circumference of a circle is formed by the flowing point *b*. Now if none of the circumference persists through the flowing of *b*, the only point that exists on the circumference is *b* itself. Thus, the circumference is never simultaneously present to the center, but only the point where *b* exists. *If* the whole circumference existed simultaneously, the whole would be present to the center, and if—*per impossible*—the whole of time were simultaneously existent, then the whole would be simultaneous to eternity. But in fact, time is not a static, but a flowing circumference, and none of the circumference is actual but an instant. Therefore, none of it is present to eternity except for the instant which is present. Scotus’s handling of this example illustrates so well the crucial difference his conception of time plays in his understanding of God’s knowledge of future contingents. World-lines of objects do not exist, only present points. If such world-lines existed, they would be present as a whole to God. But in fact they do not; only the existents of the present moment exist and are present to God.

Not content with having refuted the arguments given for this opinion, Scotus presents some objections of his own.¹² If an effect has existence in itself in relation to the First Cause, then it has actual existence, since there is nothing in relation to which it could have a more real existence. But that means that if some future existent is actual in its relation to God, then it is absolutely actual. Therefore, it is impossible that it should be made actual later. Again Scotus presupposes that becoming is real, that future things are not on an ontological par with present realities, equally existent, and that becoming is not merely mind-dependent. He assumes that when things come to be present, they come into existence or are actualized, rather than merely come into the “now” of our

consciousness. Since on his view, things become present as they are actualized, it is impossible that the future actually exist for God. The implication for the account of foreknowledge given in the second opinion is obvious.

Scotus makes in this connection an interesting distinction between a thing's knowable existence (*esse cognoscibilia*) and its existence of existence (*esse existentiae*). Insofar as a thing has the existence of existence, it has actual being; but insofar as it has knowable existence, it need not actually exist. Now if my future sitting down is an event which has for God not merely knowable existence but the existence of existence, it follows that that event is both actual and yet will later be produced in being by God, so that the same event will be produced in existence twice, which is absurd. Scotus would be prepared to say that future things have knowable existence for God, for this means merely that He knows that they will be produced in being by Him; but his view of real becoming prevents acceptance of the opinion that the things of the future have actual existence prior to their being present.

Moreover, he argues, the opinion in question cannot secure God's certain knowledge of future contingents for two reasons. (1) A future event on this opinion besides being present to eternity is nevertheless in itself future and yet to be produced by God. Now if God has certain cognition of it, it is not because it already exists, since it is future. He must therefore have this certainty through some other means. If it be said that He does not have certain cognition of it as future, then He has to produce it before He can cognize it, which is contrary to Christian tradition. Again Scotus's argument has force only if his opponent grants Duns his dynamical view of time. For otherwise the event in itself *is* produced—not indeed, “already,” in the sense that it is produced at t_1 instead of t_4 , but it *is* produced at t_4 —and its coming to be present is mind-dependent. (2) The divine essence knows what it knows only through itself. If knowledge were produced in the divine intellect by any object of knowledge other than the divine essence, this would be “degrading” to the divine essence.¹³ Hence, even if temporal things were timelessly present to God in their existence, they are not immediate objects of knowledge of God's intellect. Rather God must have certain cognition of them through something else. Scotus here shows himself to stay within the tradition that the immediate object of the divine mind is the divine essence itself and that creatures are known only indirectly. His point is that once one adopts that doctrine there is no further need to posit the existence of future things present to God.

Scotus's vigorous attack on the opinion that God foreknows the future on the basis of the presence to Him in eternity of the whole of time stems

from a fundamental difference between him and his opponents concerning their theory of time. Scotus appears to take it as obvious that temporal becoming is real—indeed, the proponents of the second opinion themselves affirmed this—and argues on this basis that the co-existence of God with the whole of time is incoherent. All of the arguments, he writes, for the second opinion proceed from an inadequate basis, namely, the immensity of eternity.

For co-existence, which involves a relation to something else, does not follow from the immensity of eternity, unless there is something in the other extreme that could be the term of a relation of co-existence of which eternity is the foundation. And non-being cannot be the term of such a relation, and every time except the present is non-being.¹⁴

According to Boehner, the majority of scholastics followed Scotus's refutation of this opinion, and accepted that past events are past as regards God's eternity, while future events are future as regards His eternity.¹⁵ Thus, when we come to Ockham, for example, God's knowledge of future events is taken literally to be temporally prior to the occurrence of the events themselves.

Third Opinion

The third opinion considered by Scotus is once more the view of Aquinas that although things are necessary with respect to divine knowledge, nevertheless they may be contingent with respect to their proximate causes. On behalf of this opinion is the argument of Boethius: the theological fatalist asserts that what God sees to be going to happen cannot not-happen; but what cannot not-happen happens of necessity. Boethius replied to this by saying that the same future event is necessary in reference to the divine cognition and free when considered in its own nature. Another argument would be that an effect can be imperfect because of a flaw in the proximate cause, though the remote cause be perfect. In this way the causes of sin lead back only to the created will, not to God.

Neither of these arguments is cogent in Scotus's eyes.¹⁶ (1) Boethius means to distinguish between the *necessitas consequentis* and the *necessitas consequentiae*. The inference from "God knows *x* will exist" to "*x* will exist" follows necessarily, but it is not necessary that "*x* will exist." (2) Contingency is not a privation, but a positive mode of being, as is necessity. These modal properties come not from the secondary cause but from the primary cause. Unless the first cause produced the effect contingently, it could not be contingent. "If the first cause moves necessarily, then, every other cause will be moved necessarily and

everything will be caused necessarily. Consequently, if any secondary cause moves contingently, the first cause also moves contingently, since the secondary cause can cause only insofar as it is moved by the first."¹⁷ "Therefore, the whole order of causes, down to the last effect, will produce necessarily if the relation of the first cause to the cause proximate to it is necessary."¹⁸

Scotus also appeals to the notion of natural priority to expose the error of this opinion. The relation of a first cause to its effect is naturally prior to the relation of a secondary, proximate cause to its effect. Scotus is probably thinking here of essentially ordered causes, the secondary causes being mere instruments of the first. If the first cause has a necessary relation to the effect then in that prior instant of nature it confers necessary existence on it. The proximate cause cannot in a second instant of nature nullify that necessity. In an essentially ordered series all the causes act simultaneously, so that "instants of nature" are atemporal in character. They are, so to speak, different logical moments in the order of explanatory priority. The relation of the first cause to the effect is logically prior to the relation of the secondary cause to the effect because the first cause is causally prior to the secondary cause. Hence, a secondary cause cannot annul the necessity wrought by a first cause.

Moreover, what is produced by secondary causes can be immediately produced by the first cause. In that case the effect would be as contingent as it is now, in being produced via secondary causes. Thus, its contingency comes even now from its first cause. Finally, God can and has caused many things immediately and yet contingently, such as the world and souls.

Thus, it is neither necessary to posit secondary, proximate causes in order to come by contingent effects—since God could do it immediately—nor is it sufficient—since if the first cause produces necessarily then so will the secondary cause. The implication is that if God's knowledge is the cause of things in a necessary manner, then no amount of proximate causes can stave off divine determinism. On the other hand, if His knowledge produces things contingently, then proximate causes do not explain anything, and we are still left wondering how it is that God can know future contingents.

Scotus's Own View

Having rejected these three opinions of his predecessors on this matter, Scotus turns to his own explanation of how God has certain knowledge of contingent existents. It is, characteristically, very complicated, and I have sought in the following to focus on those issues that are of primary

interest for our topic at hand. Scotus first discusses how things are contingent and then how the certainty of divine knowledge is consistent with contingency in things.

How Things Are Contingent

Turning first to the question of how things are contingent, Scotus takes it as evident that contingent things do exist.¹⁹ Though it cannot be demonstrated that some being is contingent, since it is a first truth, those who deny it lack sense and deserve punishment until they come to their right minds. Now the reason that things are contingent is because of God's contingent causation of them.²⁰ As we have seen, it is impossible to preserve the contingency of any event unless we suppose that the First Cause immediately causes things contingently. Since God causes by His intellect and will, this contingency must be found in either the divine intellect or the divine will. But it cannot be found in the divine intellect, at least insofar as it is naturally prior to the divine will. For whatever the intellect grasps in this prior natural instant it cognizes necessarily. This moment in the divine knowledge would seem to correspond to what Aquinas called the *scientia simplicis intelligentiae*. In this first act of the understanding there can be no contingency. Therefore, it is necessary to seek for the contingency of causation in the divine will.

In order to understand how the divine will causes contingently, Scotus conducts a lengthy *excursus* into the operation of the human will, a discussion which we shall for the most part leave aside.²¹ He makes it clear that he is an indeterminist with regard to human free choices. The will, he asserts, is free for opposite acts. The will has not only the power for opposite acts in succession, but it also has a less evident power for opposites at the same instant. If a created will existed only for a single instant and willed something at that instant, it would not be willing it necessarily. At the same instant it has the power to will the opposite. This does not mean that it has the power to will contradictories, but that it has at that instant the power to will either one. This power is naturally prior to that act of the will whereby one of the opposites is chosen. In this prior instant the will could equally well choose the opposite alternative. Therefore, the freedom of the will is associated with a power for opposites both in succession and at the same instant.

Now the divine will possesses freedom without any imperfection, namely, "the freedom for opposite objects in such a way that just as our will can tend towards various willed objects by various volitions, so that will can tend towards any willed object whatever by a single, simple, unlimited volition."²² Only the divine essence is necessarily related to the

divine will as its object. Therefore, it is related to everything else contingently, in such a way that it could be related to its opposite.²³ The divine will, insofar as it is naturally prior to its act of willing, tends to an object contingently in such a way that at the same instant it could tend toward the opposite object. Scotus emphasizes that this is a real power which is naturally prior to its act.

*How Certainty of Divine Knowledge
is Consistent with Contingency*

How, then, is the certainty of divine knowledge consonant with the contingency in things? Henry of Ghent suggested that the divine intellect, seeing the determination of the divine will, sees that some thing will exist at t_n because that is when God wills it to exist.²⁴ Scotus, however, thinks that this introduces an element of discursiveness into the divine intellect, as if the intellect from an intuition of the determination and immutability of the will *concludes* that some thing will exist. Therefore, he proposes a different answer: the divine intellect presents to itself either individual essences, whose union is contingent in reality, or else propositions in contradictory pairs, and the will by choosing one part of the contradiction to characterize reality thereby makes the proposition "This will exist at t_n " true. But given that this proposition is determinately true, the divine intellect understands this truth via the divine essence. There are thus three moments in the divine knowledge of any contingent truth, as Scotus explains:

And so far as the [divine] essence is concerned, this happens naturally in the following way. Just as it naturally understands all necessary principles as if prior to the act of divine will, because their truth does not depend on that act and they would be known by the divine intellect if—*per impossibile*—it did not will; so the divine essence is the basis (*ratio*) of cognizing those at the prior instant, because they are true then. Not that those truths, or even those terms, move the divine intellect with the result that it apprehends such truth; for if they were, the divine intellect would be defiled, because it would be acted upon by something other than its essence. Rather the divine essence is the basis of cognizing such complexes the same way it is a principle of cognizing simples. But they are not contingent truths then, because in that case there is nothing through which they are determinately true. But given the determination of the divine will they are already true at that second instant [of nature]. And the divine intellect will understand those that are already true at the second instant and were cognized at the first instant, if they existed at the first instant, by virtue of the same principle as it understood them in the first instant.²⁵

In the first instant of nature, the divine intellect comprehends via the divine essence all individual essences that could possibly be instantiated

as well as all necessary truths. In the same instant it grasps all possible propositions in contradictory pairs. In the second instant the divine will freely chooses one of the propositions from every pair to hold for reality. They therefore have a definite truth value. In the third instant the divine intellect knows all true propositions in virtue of the free determination of God's will at the second instant. If this understanding of Scotus's account is correct, then it clearly has very close affinities with Aquinas's three moments of divine *scientia simplicis intelligentiae*, *scientia approbationis*, and *scientia visionis*.

Accordingly, one may wonder whether Scotus is any more successful than Thomas in avoiding a divine determinism. Schwamm thinks not.²⁶ On Scotus's theory, he explains, the root of all contingency is the divine will. Anything not dependent upon God's will is necessary. Scotus makes no distinction between free choices of the created will and all created existence in general: everything is contingent because it depends upon the choice of God's will in the second instant of nature. God's determination of what choices of the created will should be actual is not in any way influenced by what the created will would choose or will choose. In this sense, says Schwamm, Duns Scotus was thus the first "Thomist" in the late scholastic debate concerning God's middle knowledge. His later disciples actually abandoned their master in adopting Molinism, while the Thomists remained true to the teachings of Scotus. Schwamm accordingly indicts Scotus for a certain inconsistency in how he handles objections to the certainty and contingency of God's foreknowledge. Duns often contends that because the things foreknown could be otherwise, God could not-know them; when in fact he should assert precisely the opposite: because God could not-know some object, its opposite could exist. Sometimes he gets it right, but the tension between his account of God's knowledge and his answers to objections indicates that Scotus was *noch nicht ganz im Klaren* on this issue.

Pannenberg, however, protests this interpretation of Scotus.²⁷ He appeals to Scotus's response in the first set of objections to the Aristotelian argument that if future contingent propositions are determinately true, then everything is determined. Scotus does not appeal primarily to the freedom of God's choice from among the possibles, but to the fact that the future contingent need not occur, thereby taking the freedom of human choice into account. "But what does that mean, except the obvious truth that so long as the divine will has not yet decided, then that of the creature is also not determined by the divine decision?—It means that Duns understands the divine and creaturely decision together and does not make the attempt to infer one from the other, to place them in a deductive sequence."²⁸ This is confirmed,

Pannenberg believes, by Scotus's answer to the second argument in the same set of objections [*sic*], that because the foreknown contingent could not-happen, it is also possible that God not foreknow it. Similarly in distinction 40, he states that predestination depends on the creature's decisions. Schwamm calls such statements inconsistent only because they fail to fit his deterministic interpretation. Scotus is clear that before a future contingent exists, it may or may not come to be, since it is not causally determined—either by God or by human will. How then does God have determinate knowledge of indeterminate future contingents? Pannenberg notes that God has certain knowledge of all possibles in the first instant of nature, and this knowledge is determinate. Admittedly He first knows actual future contingents only with the second instant in which the divine will wills these contingents, but the decision of the divine will occurs only in connection with the working of the creaturely will. God's will does not determine the created will but takes account of its decision in the divine decision.

It seems to me that Pannenberg fails to appreciate or turn back the force of Schwamm's argument. Schwamm does not deny—indeed, he affirms—that Scotus's replies to objections are indeterminist in that they ground the contingency of God's knowledge in the contingency of things. But his point is that such a position appears inconsistent with Scotus's account of how God knows future existents, which seems deterministic. God's knowledge of all possibles in the first instant of nature provides no knowledge of the actual world, as Pannenberg admits. But in choosing among the possibles, God can in no way take the creaturely will into account, since God Himself determines the truth of every contingent proposition, including those about the decisions of the created will. Pannenberg speaks almost as though God's will waits until the created will exists and then makes its decision—which would violate God's immutability of knowledge and in effect remove divine foreknowledge. But God cannot concur with the decision of a created will which does not yet exist, for His foreknowledge of its decision is based on His willing to instantiate one possible choice of that will. Hence, any attempt to preserve indeterminism for Scotus's theory by taking decisions of the created will into account seems futile. Actually, the moot point in Schwamm's argument, it seems to me, is whether Scotus's replies to objections are incompatible with a deterministic account. One could argue that these replies are cogent refutations of the specific objections, but fail to present the full picture. Thus, it is true that God's knowledge could be otherwise because the future existent, insofar as it is temporally contingent, could be otherwise; nevertheless, insofar as it is willed by God it could not be otherwise. Scotus's replies to the objections come out

of a tradition which is indeterministic, however, and their marriage with Scotus's apparently deterministic theory of divine knowledge is uneasy. It seems to me, therefore, that Pannenberg fails to penetrate to the heart of Scotus's theory; appeal to the created and divine wills' *Zusammenwirken* is illegitimate.

A more promising escape route for a modern Scotist would be to maintain, as J. L. Mackie has done, that God could know various possible worlds in which persons freely choose certain courses of action and that God could then will to actualize one of those worlds. Hence, that world of freely operating agents would become actual, and God, knowing the choice He has freely willed, would foreknow the persons' free acts. Such a theory has been challenged, however, because, as Alvin Plantinga argues, God may not have it within His power to actualize just any logically possible world: given that the agents are truly free, God cannot control the decisions they actually make, once He has created them, so as to guarantee that the world in view is actualized—a point very similar to one of Ockham's objections to Scotus's theory.

Now given Scotus's theory of God's foreknowledge of existents, it is clear, according to Scotus, that God's knowledge is determinate, certain and infallible, and immutable. The divine intellect knows determinately because of the determinations of the divine will, which result in the determinate truth or falsity of all propositions. God's knowledge is certain and infallible because the intellect knows certainly and infallibly the determinations of the divine will. Since God's will and intellect are immutable, so is God's knowledge. Insofar as the necessity of God's knowledge is concerned, it may seem necessary to distinguish between the composite and divided senses of the proposition "God necessarily knows *p*." In the composite sense it is false, for this would be to say that God's knowing *p* is necessary. But it is true in the divided sense in that God's knowledge is necessary in itself, though what He knows is contingent. But Scotus prefers to simply deny this proposition outright: the predicate with this modal determination is not truly predicated of God. Thus, God contingently knows *p*, though certainly and infallibly.

On Scotus's view, then, God's knowledge of future contingent propositions is based upon His knowledge of His own will to instantiate the states of affairs which render those propositions true or false. The propositions are contingently true or false because God's will is not predetermined in any way to select one member of a contradictory pair rather than the other. Thus, the certainty of divine foreknowledge does not, in his opinion, remove the contingency of future existents.

OBJECTIONS AND REPLIES

Concerning God's Determinate Knowledge

Let us now turn to several objections which Duns considers against his viewpoint. First he presents two objections against God's having determinate knowledge of future contingents:²⁹

1. According to Aristotle, future contingents are not determinately true. Therefore, they are not determinately knowable. If they were determinately true, there would be no need to deliberate or take trouble. Thus, if God had determinate cognition of future contingents, fatalism would result.

2. If God's power were limited in such a way that He has power over only one member of a pair of opposites, He would not be omnipotent. Similarly, if God knew one part of a contradiction in such a way that He could not know the other part, He would not be omniscient.

In reply to the first argument, Scotus does grant that the truth of propositions about the past or present is not similar to the truth of propositions about the future. "Truth is determinate in those about the present and the past, in such a way that the one extreme is posited. And insofar as it is understood to be posited, it is not within the power of any cause that it should be posited or not posited... There is, however, no such determination where the future is concerned."³⁰ According to this statement a proposition is determinate in its truth value insofar as the state of affairs corresponding to it is actualized, or posited in reality. Causal determination is apparently irrelevant to this property of propositions. A proposition describing a future causally necessary state of affairs is true or false, but not in the determinate sense that attaches to past/present propositions. Scotus is evidently equating determinate truth with temporally necessary truth, a point which seems to escape both Schwamm and Pannenberg. Once the state of affairs is posited in reality, the corresponding past/present-tense proposition is temporally necessarily true, or determinately true. It is such because it is then and thereafter causally impossible to make the proposition have its opposite truth value. By contrast, for any given future-tense proposition, "... it is not true in such a way that it is not within the power of any cause at that instant to posit the opposite."³¹ These comments are noteworthy because Scotus is struggling to analyze the notion of temporal necessity in the more familiar terms of causal openness. So long as the future state of affairs is not yet posited in reality, it is causally open to one to bring about that state of affairs or its opposite, though it is true that one will not bring about its opposite. One *could* bring about its opposite and, hence, the proposition which is true *could* be false. But once the state of affairs is

posited in reality, one could not bring about its opposite because the past is causally sealed off, so to speak, and therefore the proposition could not be false. Scotus's remarks on this score are by no means precise, but they certainly are suggestive. Nor is he consistent in his use of "determinate." Very often he appears to mean by that simply "definite," not "temporally necessary," as when speaking of all propositions' having determinate truth value or God's having determinate knowledge. In any case, future-tense propositions are true or false and therefore knowable by God. But because they are temporally contingent, their being true or God's knowing their truth does not entail fatalism.

In response to the second objection, Scotus replies that God is able to know either part of a contradiction, just as He is able to will and able to produce either part. But insofar as He in actuality does know one part rather than its opposite, no imperfection is involved. For He knows the one part in such a way that He *could* know the other part instead.

Concerning God's Certain and Infallible Knowledge

Scotus also presents two objections against God's knowledge being certain and infallible:³²

1. It is a valid argument that "God cognized that I would sit down tomorrow, and I will not sit down tomorrow; therefore God is deceived." By replacing the second premiss with a *de possibili* statement, we have a cogent argument: "God cognized that I would sit down tomorrow; and I *can* not sit down tomorrow; therefore, God can be deceived."

2. If God knows that I shall sit down tomorrow, and it is possible that I do not, let us suppose that in fact I do not. It follows that God is deceived. Since the impossible does not follow from the positing in fact of what is possible, it follows that "God is deceived" is possible.

Against the first argument Scotus observes that to be deceived means to think that a thing is otherwise that it is at a certain time. But in the modal argument, the assertoric premiss affirms something about an instant, while the *de possibili* premiss affirms a power for the opposite for the same instant, not taken conjunctively, but rather disjunctively. Therefore, it does not follow that at any instant the opposite of what God believes could really exist. Scotus's point is that if God cognizes that I shall sit down at t_n , then it follows that I do sit down at t_n . It remains true that I could not-sit down at t_n , but this does not mean it is in my power both to sit and not-sit simultaneously. Rather it is within my power to do *either*. But my power to do either at t_n cannot deceive God, since whichever I will do He will know. "For if my intellect always followed the changes in reality—so that when you are sitting down I think that you are sitting

down, and when you stand up, I think that you are standing up—then I could not be deceived.”³³ From the propositions “You can not-sit down at t_n ” and “I cannot be deceived,” it does not follow that “I do not know that you will sit down at t_n ,” but only “It is not necessary that I know you will sit down at t_n .” Now in the case of the divine intellect, although it does not follow things in the way that an effect follows a cause, still there is a concomitance. Just as a thing can not-exist, so the divine intellect can not-know it. Although for Scotus future contingents are not the source of God’s knowledge of them, nevertheless these are in lock-step with each other, so that the divine intellect never cognizes a thing to be other than it is. Hence, He cannot be deceived.

As for the second argument, there is no inconsistency as a result of positing the *possibility* of my not sitting. But when the possibility is posited in such a way that an assertoric proposition results, for example, “I do not sit,” then an inconsistency may arise. In such a case, the impossible does follow from two impossible premisses. But from positing the proposition “it is possible that I not sit down” nothing impossible follows. Hence, though it is possible that some future contingent not occur, God knows infallibly that it will occur.

Concerning the Necessity of God’s Knowledge

Scotus then presents four objections which allegedly prove that God’s knowledge is necessary.³⁴ These are based on the inference from “God immutably knows p ” to “God necessarily knows p ”:

1. Necessity is not posited in God except in the sense of immutability. Therefore, whatever is in Him immutably is in Him necessarily.
2. The contingent is essentially mutable. For it cannot come to be without mutability. Therefore, everything immutable is essentially necessary.
3. Whatever can exist in God can be the same as God. But whatever can be God necessarily is God, since God is immutable. Since God can know p , it is necessary that He knows p .
4. Every simply absolute perfection is in God necessarily. Knowing p is an absolute perfection, for if He did not know p He would be essentially imperfect. Therefore, He knows p necessarily.

To the first objection, Scotus replies that even if there is no necessity in God other than immutability, it does not follow that immutability itself conveys simple necessity. “For immutability takes away only the possible succession of one opposite after another; but simple necessity absolutely removes the possibility of that opposite, and not [merely] the succession of one after the other. And this inference ‘One opposite cannot succeed

the other; therefore the opposite cannot obtain' does not hold."³⁵ Duns is here apparently arguing that though God immutably knows p , nevertheless it is still logically possible that He know $\sim p$. Hence, God's knowledge cannot be called necessary in the sense that it is logically impossible for it to be otherwise.

In reply to the second objection, Scotus grants that a possible being insofar as it really exists is mutable. But insofar as it is merely understood or willed, it does not essentially involve mutability. But insofar as it is thus immutable, no essential necessity is thereby entailed. Again the point would seem to be that although God has immutable knowledge, this does not imply that it is logically impossible for Him to know other than He does.

As for the third argument, a thing may be said to be able to exist in God in two ways: either essentially or by predication of Him. While the major premiss is true as regards the former, it is false as regards the latter. For example, God is called "Lord," but this appellation does not signify anything which is the same as God. For He is called "Lord" only in virtue of temporal things in relation to which He is Lord. Similarly God's knowledge of objects is in God in this second way only. God has this knowledge only in virtue of the relation of the object known to the divine knowledge.

The fourth argument errs because no absolute perfection in God depends on creatures. Therefore, knowledge of p as such is not an absolute perfection, though knowledge taken in itself is an absolute perfection. Hence, the minor premiss of the argument is false.

Concerning the Compatibility of God's Knowledge with Contingency

Finally Scotus presents two objections purporting to prove the incompatibility of God's determinate and certain knowledge with the contingency in things:³⁶

1. It is a valid inference that "God knows p ; therefore, p will necessarily be." Moreover, the antecedent is necessary because the act of knowing something is not "distracted" by the matter it governs.³⁷ Since God's knowing is absolutely necessary, it is not distracted from this necessity by virtue of governing what is contingent. (As is evident from his reply Scotus does not refer here to the temporal necessity of God's knowledge, but rather to the necessity of His knowledge as an essential property of God. Since "God knows p " is necessary whether p is contingent or necessary, it follows that "Necessarily p .")

2. Everything that God knows will be will necessarily be. Since God knows that p , necessarily p will be. The major premiss is true *de necessario*. The minor is absolutely assertoric, since it is true for eternity. Hence, the

de necessario conclusion follows. (Scotus here does speak of temporal necessity with regard to God's knowing p . Since the first premiss is logically necessary and the second temporally necessary, it follows that "Necessarily p ."')

In response to the first objection, Scotus maintains that the premiss "God knows p " is not necessary. As we saw earlier, he thinks that it is simply false that "God necessarily knows p ." Though God's knowledge is necessary in itself, it is able to relate to different objects. Though God necessarily knows, He does not necessarily know *this*.

Scotus's answer to the second objection comprises all of one sentence: "The mixed inference does not hold good unless the minor is absolutely assertoric, not only in that it is true for every time, but that it is necessarily true."³⁸ His claim is that a necessary conclusion does not follow from a logically necessary premiss and a temporally necessary premiss. Both premisses, it would appear, must be logically necessary. Why? Perhaps because from the fact that God knows p we may only infer that the corresponding state of affairs S *will* be, not that not- S *cannot* be. Not- S could come to obtain rather than S , in which case $\sim p$ would be true rather than p and God would know $\sim p$ instead of p . Granted that God does know p and always has and will, we know that S will be posited in reality. But this does not warrant the inference that it is impossible that not- S be posited in reality instead. But if it were going to be so posited, God would know $\sim p$ now and always would have. Hence, the conclusion only follows necessarily if the minor as well as the major is logically necessary, which, we have seen, it is not.

SUMMARY

In summary, Scotus has argued that the basis for God's foreknowledge of future events is His knowledge of His own will to create them. By willing certain possibles to be instantiated in the temporal process God thereby furnishes the truth conditions for all contingent propositions. Since God knows the determinations of His own will, He knows which future contingent propositions are true and which are false. God's knowledge is certain and infallible because He knows via His own essence the determinations of His will. Though it is temporally possible that what He has willed should happen other than it in fact will happen, God cannot possibly be deceived, since if it were going to happen differently He would know it. There is no inconsistency in holding that God infallibly foreknows p and that $\sim p$ is possibly true. God's knowledge is contingent because His will selects freely from among the possibles. Although His knowledge is immutable, this does not imply that it is

logically necessary that He know what He does. His knowledge is determinate or definite because it is based on the determinations of His will. But the future contingent propositions He knows to be true are not determinately true in the sense of temporal necessity. Prior to the positing in reality of the state of affairs S the corresponding proposition p , though true, could be false, not merely in the logically contingent sense, but also in the sense of temporal contingency. Only after S is instantiated is it impossible that $\sim p$ be false. Hence, though God knows p to be true, not only is it logically possible for $\sim p$ to be true, but it is temporally possible prior to t_n that $\sim p$ be true. There is thus a sort of double contingency in future-tense propositions. Such contingency in things is not incompatible with God's certain knowledge, for if the things should occur differently than they will, God's knowledge would have been different than it is. Scotus has thus tried to provide both an account of the means of God's knowledge as well as an account of how the certainty of that foreknowledge is not incompatible with the contingency of future events—two accounts which often seem to pull in different directions from one another.

CHAPTER SIX

WILLIAM OCKHAM

Recent translations of some of Ockham's works into English have stimulated a renewed interest on the part of contemporary philosophers in his thought, and one often finds his name bandied about in current discussions of theological fatalism. For Ockham the relationship between God's foreknowledge and future contingents was a literally conceived concern, for he held that God's eternity was not a state of timelessness, but that God, though immutable, endures throughout all past, present, and future time, which arises from the order of succession among changing things.¹ His analysis of the relationship between God's foreknowledge and future contingents is most clearly spelled out in his *Tractatus de praedestinatione et de praescientia dei respectu futurorum contingentium*. Question two of that tract, on the pattern of Scotus's treatment, asks with regard to future contingents whether God has determinate, certain, infallible, immutable, and necessary knowledge of one member of a contradictory pair. Since I hope to deal with the immutability of God's knowledge in a future book, we shall follow William as he treats the other four characteristics of God's knowledge of future contingents.

GOD'S DETERMINATE KNOWLEDGE OF FUTURE CONTINGENTS

Objections

Article one begins with several traditional objections to God's determinate knowledge of future contingents:²

1. Future contingents have neither determinate truth nor falsity. Therefore, they cannot be known by God.
2. If future contingents did possess determinate truth or falsity, then necessarily whatever was determinately known by God would come to pass. Hence, it would be futile to deliberate and take trouble.
3. If God could bring about something determinate so that He could not bring about its opposite, He would have determinate and limited power. Similarly, if God had determinate knowledge of one part of a contradiction so that He could not know its opposite, then He would have determinate and limited knowledge.
4. What is not determinately true cannot be known by God with determinate cognition. But since future contingents are not determinately true, God cannot have determinate cognition of them.

Clearly the first, second, and fourth objections stem from Aristotle, while the third is much the same as Scotus's objection to God's determinate foreknowledge.

Ockham's Position on the Truth Value of Future Contingent Propositions

According to Ockham, the Christian faith opposes all these objections. He repeatedly emphasizes that "...God has determinate cognition in respect of future contingents since He knows determinately which part of the contradiction will be true and which false."³ Ockham feels compelled as a Christian to part company with Aristotle over the issue of the antecedent truth-value of future contingent propositions. He writes,

For Aristotle maintains that no such contingent proposition about the future is either true or false; thus in accordance with Aristotle's point of view one part of a contradiction involving such propositions is no more true than the other. Therefore, ...one part of [such] a contradiction is no more known by any intellect whatever than is the other, for what is no more true [than another] is no more knowable [than another]. For this reason Aristotle would not have maintained that a future contingent is known by God, since in his view no future contingent is true, and nothing is known except what is true.

The truth of the Faith maintains, however, that future contingents are known by God, so that one part of a contradiction [involving them] is known by God and the other is not known by God. For example, from eternity God knew this: the Blessed Virgin is to be saved and He never knew this: the Blessed Virgin will not be saved.... Therefore one part of the contradiction is known and not the other; and so one part is true—viz., the one that is known—and the other is not true, since it is not known by God.⁴

Ockham here makes it clear that the Faith requires both (1) that God knows one and not the other of a contradictory pair of future contingent propositions and (2) that exactly one proposition of such a pair is true and the other is false.

Determinate Truth or Falsity

The fact that Ockham in the above passage omits the qualifier "determinately" suggests that this modifier is really superfluous, so that "determinately true" is equivalent to something like "definitely true," or simply "true."⁵ He believed that future contingent propositions are true or false and that God knows all such true propositions.

Nevertheless, it is important for an understanding of Ockham's view that we ask why future contingent propositions have (determinate) truth

values.⁶ The answer is related to his theory of supposition. According to Ockham a present-tense proposition is true depending on whether and how its subject and predicate terms supposit or stand in for the realities they signify. For example, "Some A is B" is true iff there exists something for which both "A" and "B" supposit; "No A is B" is true iff nothing exists for which both "A" and "B" supposit. But since Ockham rejected the view that past and future things are ontologically on a par with the present, the terms in past- or future-tense propositions lack any reality for which they may supposit; accordingly, such propositions would seem devoid of truth value. Ockham avoided this implication by making the truth of present-tense propositions central to the truth-conditions for past- and future-tense statements. His general strategy is to formulate the truth conditions for a past- or future-tense proposition in terms of the past or future truth of some present-tense proposition. The present truth of any given future-tense proposition depends on the future truth of some present-tense proposition about the same realities supposed for in the future-tense version. In order for a future-tense proposition to be true, there must be a present-tense proposition, in which the predicate is predicated of a demonstrative pronoun referring precisely to that reality for which the subject supposits, which will be true at some time. For example, "A boy will be an old man" is true, not because it will be true that "A boy is an old man," but because it will be true that "*This* [referring to that person who is now a boy] is an old man." Freddoso calls this centrality of present-tense propositions in furnishing the truth conditions for future- and past-tense propositions Ockham's doctrine of the metaphysical primacy of the pure present.⁷ A proposition is at any given moment *t* true at *t* because of what, at *t*, has been or is or will be purely present.

But why does Ockham refer to the truth values of future-tense propositions as *determinate*? The answer lies in the fact that for Ockham future states of affairs are determinate.⁸ Indeed, he seems indifferent to the distinction between future contingents and future contingent propositions, freely characterizing the former as true or false. It is perhaps in this sense that Ockham often says that God knows which part of a contradiction will be true or false—an expression which copyists often "corrected" by substituting *est* for *erit* and which the Adams-Kretzmann translation occasionally renders "is" rather than "will be" without textual support. For Ockham future contingent propositions *are* determinately true or false because the states of affairs to which they correspond *will* determinately be or not be actually present.

But if a future contingent proposition is determinately true or false based on the determinacy ("determinate-ness") of the corresponding

future states of affairs, what then does it mean to say that a future state of affairs or thing is determinate? Clearly, Ockham does not thereby mean "necessary", after the Aristotelian fashion of so characterizing things which are either actualized or part of an everlasting, recurrent process, for then the future things would not be contingent. Future states of affairs may be determinate without being causally determined or necessary. Nor, obviously, does he mean "certain" or "certainly knowable," for future contingents are not perspicuous to the insight of human reason, and Ockham struggled to explain how even God can have certain knowledge of determinate future contingents.

Rather Ockham would probably understand by "determinate" with regard to states of affairs that one may specify with regard to that state of affairs whether or not it obtains in the actual world. The "obtains" here is tenseless, and key to Ockham's position is the view that the notion of determinacy is unrelated to the question of whether the state of affairs is past, present, or future. The only question is, can one say that it *obtains* in the actual world? If that question can be answered then the state of affairs is determinate. Now future contingent propositions, corresponding to determinate states of affairs, are accordingly determinately true or false, that is to say, it is in principle possible to specify their truth value. Since God knows such propositions, His knowledge of them or of the future is determinate, that is, one may specify whether for any state of affairs *S* God knows whether *S* obtains. Hence, Ockham's position seems to be that future contingent propositions are true or false according as they correspond with states that obtain in the actual world.

Contingent Truth Value

Now although future-tense propositions are determinately true or false, nevertheless for Ockham they are contingent in a very special sense.⁹ While temporal considerations must be left aside in adjudicating the issue of whether such propositions are determinately true or false, such considerations play a vital role in determining whether a proposition is contingent or not. For even though a proposition is true or false based on whether the corresponding state of affairs obtains in the actual world, nevertheless because the states of the actual world are instantiated, or as Ockham puts it, "posited in reality,"¹⁰ successively, it remains contingent whether any state of affairs obtains until it is temporally instantiated. Thus, for any given state of affairs in the actual world, it is crucial to know when it obtains; one should always specify it with a definite temporal indexical: "*S* obtains at t_n ." So if it is now t_1 and *S* obtains at t_4 , then the proposition *p* describing *S* is now determinately

true, since its corresponding state of affairs obtains (tenselessly); but until t_4 p is contingent. At t_4 and thereafter, once S has been instantiated, it is no longer contingent whether S obtains, and so p is necessary. This is because it is impossible to change the past.¹¹ Not that Ockham thinks we can change the future; but we can determine what the future will be. Prior to t_4 it is genuinely possible that S not be instantiated, even though it will be; thereafter, it is impossible. Accordingly p , though true, prior to t_4 may possibly be false and never be true; thereafter, it is necessarily true. Ockham emphasizes that when one says that a determinately true proposition can be false, he does not mean it can change from being true to false.¹² Rather he means that prior to t_4 , p can have *always* been false, though it is in fact true. His position is perhaps better expressed by saying that prior to t_4 , p is possibly true or possibly false, but that at t_4 and afterward p is necessarily true or necessarily false. Ockham on one occasion calls this necessity *per accidens*¹³, and it seems to be the same as what we have referred to as temporal necessity. For Ockham is not talking about logical necessity, since such necessity would be *per se* and atemporal. Nor is he speaking of causal necessity, for even causally determined future states of affairs are temporally contingent prior to their instantiation, since a free agent could impede them.¹⁴ Hence, for Ockham all future-tense propositions, whether causally necessary or causally contingent, are not necessary *per accidens*, though all are determinately true or false.

According to Boehner, the view that once a proposition is made to be true by the actual state of things then the corresponding proposition about the past is necessarily true was common to all scholastics.¹⁵ But Ockham also argues that not only future-tense propositions, but many past- and present-tense propositions as well are temporally contingent.¹⁶ They are only verbally about the past or present, but really concern future states of affairs and are therefore equivalent to future-tense propositions. Though they are ostensibly about actualized states of affairs, in fact the states of affairs on which they depend for their truth are future. Therefore, such propositions are not necessary *per accidens*. It is still possible that they be false and have always been false, though they be true. Ockham's favorite example is "Peter is predestined," a proposition which, in his analysis, is equivalent to "Peter will be saved." "Being predestined" is not a property one possesses; it simply means that God gives to that individual eternal blessedness on the final day. Since that event is still outstanding, this proposition is not necessary, though it may be in the past- or present-tense. Thus, the proposition "God gives Peter eternal blessedness at t_n " is necessary at t_n , t_{n+1} , t_{n+2} , ..., but is not necessary at t_{n-1} . Ockham is not very precise on how to identify merely

verbally past/present propositions; he usually says only that they are equivalent to propositions about the future; or he may say that when a proposition about the present is equivalent to a proposition about the future or depends on the truth of a future proposition (*quando aliqua talis propositio de praesenti aequivalet propositioni de futuro vel dependet a veritate alicuius futuri*), then there is no proposition about the past which is necessary.¹⁷ These definitions are not very helpful, and one learns more of what Ockham meant from his discussion of theological fatalism than from the definitions alone. I think it would be fair to say that his view was that a proposition is only verbally past/present when the state of affairs to which the proposition refers is really a future state of affairs (as in "Peter is predestined") or else the state of affairs to which the proposition refers obtains in virtue of the fact that some future state of affairs obtains (as in "John correctly believes Peter will be saved").

Now Ockham will argue that future contingent propositions are determinately true or false, but not necessarily true or false *per accidens* and that since God's foreknowledge depends on the actualization of the relevant future states of affairs, propositions like "God foreknows *p*" are also temporally contingent.

With regard, then, to the first objection, Ockham obviously interprets Aristotle along the lines of the standard modern interpretation.¹⁸ In his commentary on the ninth chapter of *De interpretatione* Ockham switches freely between describing Aristotle's position as denying that future contingent singular propositions are determinately true or false and describing it as the flat denial of truth or falsity in such propositions. In the *Summa logicae* he drops the language of determinate truth value altogether. In the *Ordinatio* and *Tractatus* he states clearly that for Aristotle neither member of the contradictory pair is true: "But as regards these [propositions] truth is not determinate, since according to him no reason can be given why one part is true rather than the other. Consequently both parts will be true or neither will be true. But it is not possible that both parts be true. Therefore neither is true."¹⁹ It is also of interest that Ockham connects Aristotle's argument with human free decisions, a connection which Aristotle did not explicitly make. When Ockham says no reason can be given why one part is true rather than the other, he has reference to the fact that the motion of the will is not determined by natural causes.²⁰ In all natural things there is inevitability and necessity, so that only the acts of a free agent introduce contingency. Since the future free acts of the will are now indeterminate, Aristotle, according to Ockham, held that propositions about those acts are neither true nor false. By contrast, Ockham contends that while such acts are causally indeterminate, still propositions about those acts are true or false, since such acts will be instantiated in the actual world.

*Replies to Objections**First Objection*

Therefore, in response to the first objection William declares that it is beyond question that God knows with certainty the truth of future contingent propositions.²¹ Yet, he insists, it is not necessary that God know any given future contingent proposition rather than its opposite. It is a contingent matter whether God in any given case knows p rather than $\neg p$. Even if a proposition is omnitemporally true, that does not mean that it is necessarily true, and, hence, necessarily known by God.²² It is important to keep in mind that Ockham is not speaking here of logical necessity, but necessity *per accidens*. His point is not that it is logically possible for God to have known other future contingent propositions to be true than those that He does, but rather that up until the moment at which the relevant states of affairs are actualized the corresponding true propositions could have been false and therefore up until that moment God could have known other that He did know. Given that a future contingent proposition is true, it cannot become false²³, but temporally prior to the instantiation of its corresponding state of affairs, it was possibly false. In this sense it is immutable and yet not necessary. Now since what God knows is based on what is true, His knowledge is as contingent as the propositions He knows. Therefore, for any future contingent proposition p , "God knows p " is true only if p is true, since God knows only and all true propositions. But since p may not, up to t_n , be true, so also "God knows p " is also temporally contingent. Ockham writes, "For example, 'God knows that this person will be saved' is true and yet it is possible that He will never have known that this person will be saved. And so that proposition is immutable and is nevertheless not necessary but contingent."²⁴

Contingency of Divine Foreknowledge

But what does Ockham mean when he says that it is possible that God will never have known p ? Adams took him to mean that while God's *believing* p is temporally necessary, God's *knowing* p is temporally contingent until p is posited in reality.²⁵ This is because God's belief up until the instantiation of the state of affairs S predicted by p may be mistaken, may not in fact be knowledge. Only from the moment that S is posited in reality is it impossible for p to be false; therefore only from that moment is it impossible that God be in error.

This interpretation seems initially plausible, but I cannot but doubt whether this is Ockham's meaning.²⁶ I do not find him anywhere making

the distinction between God's belief and God's knowledge. Adams appealed to his truth value neutral use of *notitia* as opposed to *scientia* in assumption six of the *Tractatus*.²⁷ But this is plainly mistaken, for Ockham uses the terms interchangeably in that assumption.²⁸ The same is the case in the *Ordinatio*.²⁹ The synonymy of these terms is evident in the second article of the second question of the *Tractatus*, as we shall see. He does not appear to be saying that since it is possible up to t_n that p be false, God's cognition may up to that point possibly not be knowledge. Rather he seems to be contending that it is possible that up to that point God would not have known, that is, cognized, p at all—He would instead have known $\sim p$.

Adams's reading is attractive because it does indeed seem that God's believing p from eternity is necessary *per accidens*, since it is past; whereas His truly believing (knowing) p is temporally contingent up until t_n . But on Ockham's view of temporal necessity, it is not clear that God's believing p is necessary *per accidens*.³⁰ For it could be said that "God believes p " depends upon the future actualization of S or the truth of the future-contingent proposition p . For God would not have believed p had it not been for the fact that p is true or that S will be actualized. In this sense, "God believed p " conforms to Ockham's definition of a merely verbally past-tense statement. Thus, the point is not that God's belief may not be knowledge prior to t_n ; rather it is that prior to t_n it is temporally contingent that God cognizes p rather than $\sim p$. After all, Ockham doubtlessly believed it is logically impossible that God should be mistaken.³¹ But if this is logically impossible, how then it is supposed to be temporally possible? What is logically impossible can at no time be possible. But not only is it logically possible that God should know $\sim p$ rather than p ; up until t_n it is temporally possible that God know $\sim p$ rather than p . Only after S is posited in reality is it necessary that God knows p , and that because p is from that point on temporally necessary.

One may draw an instructive analogy between the contingency of God's belief and His will. It would seem that God's willing something in the past is just as temporally necessary as His believing something in the past. And yet Ockham repeatedly affirms that prior to t_n it is contingent that God wills something. Thus, he asserts that the proposition "The will wills x at t_1 " is now determinately true and will always be true after t_1 ; hence, the proposition "The will does not will x at t_1 " never was true but could have been true up until t_1 , at which instant it was no longer possible for it to be true (since at that instant the opposite state of affairs was actualized).³² With regard to the divine will, the proposition "It is possible that God, willing that A will be, does not will that A will be" is false in the sense of composition, but true in the sense of

division.³³ In the composite sense, this would mean, "God, willing that *A* will be, does not will that *A* will be," which is self-contradictory. But in the divided sense it means, "God, willing that *A* will be, can not-will that *A* will be." The proposition in the divided sense is true because up until the moment in which *A* is instantiated, it is possible that God not will *A*. But if God wills that *A* will be, it might be objected, then to say that He can not-will *A* implies that God can will a contradiction. Ockham responds that when one says God can not-will *A*, he does not mean, "God willing that *A* will be does not will that *A* will be," but rather, one means "God does not will *A*" is possible. If such a state of affairs is posited in reality, it follows that God never willed *A*. But this state of affairs is, like its opposite, contingent. The point seems to be that prior to t_n , though one state of affairs is posited in reality, the opposite state of affairs could be actual instead; but after t_n the possibility of the opposite's obtaining is removed.

Similarly, with regard to God's knowledge. "God has determinate knowledge of future contingents because He knows determinately which part of a contradiction will be true and which false."³⁴ But it does not follow "that God necessarily knows this future contingent. It is not to be granted that He has necessary knowledge in that way, for just as it contingently will be, so God contingently knows that it will be."³⁵ Again the point is that God's knowledge, like His will, though posited in reality, could be other than it is prior to t_n ; thereafter it could not be otherwise. Since the determination of God's knowledge and will depends on the actualization of some state of affairs at t_n , up until t_n this determination, though actual in one direction, could be in the other direction; but once the state of affairs is instantiated at t_n then it is no longer possible for God's will or knowledge to be otherwise determined.

Especially awkward for Adams's interpretation is article two of the second question of the *Tractatus*, in which Ockham refutes an objection which is indiscernible from the view Adams attributes to Ockham himself. We may reserve the discussion of that article until later; but in passing we may note that Ockham there rejects the position which holds that God's cognition is necessary *per accidens* and that it is therefore possible that God's cognition be mistaken. The thrust of his argument is to show that since it is impossible that God be deceived, it is a contingent matter what God cognizes or knows; if it is possible that the future states of affairs be otherwise, then it is possible that God know other than He does. Hence, it seems to me that it is unlikely that Adams's interpretation be correct.

It is noteworthy that in her introduction to the second edition of the translation of Ockham's *Tractatus*, Adams abandons without comment

her earlier interpretation of Ockham. Recognizing that "...if God were infallible regarding [future contingent] propositions, it would be logically impossible for him to be mistaken," she admits that in order for Ockham to maintain that "God believed p " is actual, there still remains the potency that it should not be and never have been actual.³⁶ In other words, God's believing p is temporally contingent, though past. Sadly, much of the contemporary discussion of Ockham's solution has proceeded on the authority of Adams's earlier work and has thus perpetuated a misinterpretation of Ockham's view.

Basis of Divine Foreknowledge

Now Ockham freely admits that he does not know *how* God has knowledge of future contingents, since one part of the contradiction is no more determined to truth than the other.³⁷ By this last phrase Ockham must mean "causally determined," since, as we have seen, he did think one part of the contradiction is determinately true. The point appears to be that if the contingent is causally indeterminate, then there seems to be no way that it can be foreknown.

Rejection of Scotist Answer. Ockham finds no solution in Scotus's answer that God's will determines one part of a contradiction to be true and His intellect then knows it as such. He presents four objections against the Scotist position.

(1) One cannot have a certain and infallible cognition on the basis of a determination which is temporally contingent. Propositions like "God willed A from eternity" are temporally contingent: prior to some t_n they can be either true or false. Therefore, such propositions cannot serve as the basis for certain and infallible knowledge of future contingents. This argument assumes that the determinations of the divine will prior to t_n are temporally contingent, which, Ockham says, Scotus grants. No doubt Scotus would have protested at this point; indeed, the argument is confusing because William seems to have conflated his own views and Scotus's. For on Ockham's view the divine will is temporally contingent because its determination depends on the future choice of a finite will. Though the divine will is determined in one direction, it is possible prior to t_n that it be determined in the opposite direction and to have always been so determined. Now since the divine cognition *ex hypothesi* follows the determination of the divine will, it follows that God's cognition is also temporally contingent, that is, it could equally always have been otherwise prior to t_n . But this only proves that it is contingent, which Ockham grants. How is this incompatible with its being certain and infallible? One might take "certain" to mean "necessary"; but it is difficult to see

any sense in which the divine cognition could be said to be fallible. The only way to do this would seem to be to make the divine will temporally contingent, but not the divine cognition, a distinction which seems untenable. In fact, as we shall see, Ockham explicitly rejects such a move in his refutation of the first objection in *Tractatus* 2.2. On the other hand, on Scotus's view, the human will follows the determination of the divine will. If it follows contingently, then it could oppose God's will. Hence, God's will and His knowledge based on that will would in such a case be wrong. On this reasoning, one may rightly say that God's knowledge is not certain and infallible. But on such a view God's will is not, as Ockham says, such that it is still possible that it is not determined and was never determined. Since on Scotus's view, the divine will does not take prior cognizance of human choices, it is not temporally contingent.

One way out of this muddle would be to take Ockham to mean that God in eternity is confronted with two propositions: "God wills A" and "God does not will A." One of these is determinately true, but both are possibly true. The trouble is, how is God to know which one is determinately true, so as to know the future contingent? There is no way in which He may know certainly and infallibly which is true, since both possibly are true and have been true from eternity. But while this argument may work from the third person perspective, it seems ridiculous from the first person standpoint: for surely God would know the truth of "I will A" or "I do not will A"! Another possible interpretation is that Ockham may have equated the capacity to be otherwise with fallibility and uncertainty. In the version of this objection in the *Ordinatio* he speaks of the impossibility of having certain and infallible evidence (*evidentia certa et infallibilis*) by a temporally contingent determination of the will. He concludes rather obscurely "...one cannot have certain and infallible evidence as a result of such a determination, as a consequence of which (*ex quo*) it can simply never have been."³⁸ Is the subject of *potest* the divine will or the certain and infallible evidence? If we take it to be the latter, then Ockham is saying that such evidence may possibly never have been. In the *Tractatus* *evidentia* is replaced by *certa et infallibilis notitia*, but the reasoning is the same. He concludes that "...one will have no certain cognition based on such a determination"³⁹—could he not here add *ex quo simpliciter potest numquam fuisse*, meaning that the divine cognition would as a consequence never have been? In this sense it may be thought by Ockham to be uncertain and fallible. The difficulty with this interpretation, however, is that in *Tractatus* 2.2 Ockham does not seem to find any incompatibility between the contingency and the certainty of God's knowledge.

(2) Scotus's solution must either sacrifice the certainty of God's knowledge with respect to human acts of will or else imply a divine determinism which eliminates human freedom. For the choice of the human will either necessarily follows what the divine will has determined or not. If it does, then it is acting out of necessity and is not truly free. For when the divine will has determined that one of two opposites shall be, it is not in the power of the created will to do otherwise. Hence, no act of the human will can be imputed to that will itself. On the other hand, if the human will does not necessarily follow the determination of the divine will, then God's knowing which part of the contradiction is true must depend on the determination of the human will at some point in time. It does no good to say that the choice of the human will follows contingently from the determination of the divine will, for on that account the human will could oppose the divine will. In either case, the same result follows: since the human will can choose either part of the contradiction, it is impossible that God should from eternity have certain knowledge of what that choice will be. Hence, Scotus's proffered solution leads either to determinism or a denial of the certainty of God's knowledge.

(3) But suppose, then, that the determination of the human will is present and that God sees it for what it is. Still that will can cease from its present determination and be otherwise directed. Therefore, God's knowing the present determination of the will cannot be certain, since the will can be not so determined. Again, the argument is puzzling. For according to Ockham the present is as temporally necessary as the past, so that if the will is determined in one direction, it is impossible for it at that moment to be otherwise directed.⁴⁰ But in the next moment, it can cease from its former determination and change its direction. But in this case, it seems inconsistent to say God cannot have certain and infallible knowledge of what is necessary *per accidens*. If we take Ockham to mean that God foresees the will in its future determination, then the fact that the will's determination can in the next instant change does not seem to undercut the certainty of God's knowledge. If Ockham means God's foreknowledge is fallible because the will, though so determined, may never have been so determined, then we are back to the same problem discussed above.

(4) Finally, Ockham calls into question Scotus's application of natural instants to the divine intellect and will. The account of God's knowledge as involving three such instants cannot be true, for there is no process or priority or contradiction in God such that the divine intellect at one instant does not have indubitable knowledge of which future contingents are actual and then at another instant does. Such an account would posit

imperfection in the divine intellect, since the divine intellect would receive perfection from something else. Again it is doubtful that Ockham has fairly represented Scotus, for on his theory the notion of "instants" in God's intellect and will simply conveys the notion of explanatory priority, so that neither process, nor contradiction, nor at least temporal priority need be entailed. Hence, the divine intellect is not "perfected" by anything else, though what it knows depends on the determination of the divine will.

Thus, Ockham cannot understand how God's knowledge of a future event can be certain and infallible, since the occurrence of that event is temporally contingent. Even if the future state of affairs is causally necessary, it may not obtain because of the interference of free agents. In a sense, his perplexity seems a little odd, for he maintains that future contingent propositions are true, even though their corresponding states of affairs are contingent, because those states are determinate and obtain in the actual world. God, by the same token, being omniscient, has determinate knowledge of such states of affairs, since they obtain in the actual world, though it is possible they not obtain. Such knowledge is not, indeed, necessary, since other states could obtain; but it is infallible and certain, since it is only of true propositions, which, necessarily, correspond to the states which do obtain in the actual world. If other states obtained, other propositions would be true, and these would be known certainly and infallibly by God. Perhaps Ockham's difficulty was that he could not explain how God could come by such knowledge, how He could know true future contingent propositions to be true—undoubtedly not by inference, but neither by knowing the determination of His will to one of two truth-neutral contradictories, nor by seeing the determination of the created will.⁴¹

Ockham's Answer. Therefore, Ockham concludes, "...it is to be held indubitably that God knows all future contingents certainly and evidently. But to explain this clearly and to describe the way in which He knows all future contingents is impossible for any intellect in this present condition."⁴² Nevertheless, Ockham will venture this much: the divine essence is a single intuitive cognition both of Himself and of all other things, a cognition "so perfect and so clear that it is also evident cognition of all things past, future, and present."⁴³ As Adams and Kretzmann note,⁴⁴ an intuitive cognition is for Ockham a cognition in virtue of which one knows whether a thing exists, a cognition which, if the thing exists, is immediate and evident to the intellect; by an evident cognition Ockham means an indubitable cognition. His point is then that the divine essence simply knows in itself with certainty what things exist at any time. In the same way that we can know which of two propositions

“*A* exists” or “*A* does not exist” is true on the basis of our intuitive cognition of *A*, so God on the basis of His perfect intuitive cognition of all things has certain knowledge not only of all present-tense propositions, but also of all future-tense propositions. Even if we abstract from the divine will and imagine—*per impossibile*—that God’s knowledge is in no way the cause of things, it would still be known to God which part of a contradictory pair of future contingent propositions is true and which is false. Ockham emphasizes that “...this would not be because future contingents would be present to Him to be cognized either by means of ideas or by mean of reasons, but by the divine essence itself or the divine cognition, which is the cognition by which it is known what is false and what is true, what was false and what was true, what will be false and what will be true.”⁴⁵ Although some have regarded this more or less as the collapse of Ockham’s view or as a non-explanation dressed out in the technical language of Ockham’s theory of knowledge,⁴⁶ it seems to me that such judgements may be unwarranted. What Ockham seems to hold is that no explanation can be given of *how* God knows future contingents either in terms of their presence to Him or the determination of the divine will; rather it simply belongs to the divine essence, that is to say, it is an essential property of God, that God know all true propositions. In other words, God is essentially omniscient. Ockham asserts that with this explanation we must, with regard to the basis of God’s foreknowledge, rest content.

Solution of First Objection

To return, therefore, to the issue at hand: God knows of a contradictory pair of future contingent propositions which one is true and which one is false. If it be said that such propositions lack truth value, Ockham will retort that they do possess truth values, but contingently. If it be objected that since each member of the contradictory pair could be true, one is no more true than the other, Ockham will answer that one part is determinately true because God wills it to be true. Nevertheless, He wills contingently. Ockham is not here embracing the Scotist view he just rejected. Adams and Kretzmann attempt to explain Ockham’s remarks via his distinction between the antecedent and consequent disposing will of God.⁴⁷ The disposing will of God is God’s will concerning whatever He is pleased to bring about. His antecedent disposing will expresses God’s intention for His creation; by it He supplies the natural properties and antecedent conditions necessary for the creatures to act in a way with which God will co-act. This will can be frustrated by creatures; for example, God wills all men to be saved, but many prefer their sinful ways. By

contrast, God's consequent disposing will takes account of the free actions of creatures and wills that that happen which accords with those decisions. This will cannot be frustrated, and by it God posits in being what He wills. Now on this view, when Ockham states that one part of a contradiction is true because God so wills, he is speaking of God's consequent disposing will. If it were His antecedent disposing will, then divine determinism would follow. God wills antecedently that x be saved; but since x will freely reject God's forgiveness, God wills consequently that x will not be saved. Therefore, x will most certainly not be saved. But God wills this contingently: at any time prior to his death x can repent and turn to God. He can therefore be saved, even though he will not be, and God could will otherwise, even though He does not.

It seems to me, however, that this distinction cannot account for Ockham's language at this point. When Ockham states that one part of the contradiction is true because God wills it to be true, he must be speaking improperly; for even on God's consequent will, something is not true because God wills it.⁴⁸ On the contrary, God wills something consequently because He knows that something will be the case, that is, because He knows the truth of the relevant future contingent proposition about the thing. Hence, neither with regard to His antecedent nor consequent will is a future contingent proposition true because God wills it to be true. The only way to save Ockham's language at this point would be perhaps to take the *quia* as evidential: one part is true, for God wills it to be true, and He could not will it to be true unless it were true. Adams and Kretzmann's point remains, however, that God's consequent will, conditioned by creatures' actions, is contingent in a way His antecedent will is not. Therefore, contrary to the first objection, God does have determinate knowledge of future contingents and wills contingently that they come to exist.

Second Objection

Turning then to the second objection, that if future contingent propositions have determinate truth value and are known determinately by God, then fatalism results, Ockham replies that although God does know the determinate truth of one part of a contradiction, fatalism does not result because God knows that part contingently; that is, He can not-know it and never have known it.⁴⁹ Ockham takes this reply to cover both of the fatalistic difficulties expounded by Aristotle in *De interpretatione* 9. William understands Aristotle to be representing two distinct arguments: the first based on the antecedent truth of future contingent propositions and the second based on the temporal necessity of past-tense statements about future contingents.⁵⁰

Responding to Aristotle's first difficulty, Ockham asserts that although God knows which part of a contradiction of future contingents will be true and which false, nevertheless the proposition "God knows this part will be true" is not necessary.⁵¹ He means by this necessary *per accidens*: "Indeed, it is contingent to such an extent that although 'God knows this part of the contradiction will be true' is true, it is still possible that it will never have been true. And in that case there is a capacity for its opposite without any succession, since it is possible that it will never have been."⁵² Ockham's reasoning seem to be this: the future contingent proposition p is true because S obtains in the actual world. This is an asymmetric relationship, which provides the truth conditions for p . Because, however, the actual world is instantiated successively in time, prior to the positing of S in reality, it is still possible that not- S be posited instead. Only once S is actualized is it impossible for not- S to be actualized instead. Thus, prior to the moment of S 's instantiation, $\sim p$ could be true, though it is not. This is not to say that p , being true, can cease to be true or that p and $\sim p$ may be true together, but that though p is true, it is still the case that $\sim p$ could have been true all along.⁵³ Prior to t_n it is possible that $\sim p$ be true, but at t_n and thereafter this possibility is eliminated. Therefore, no necessity is imposed on the future contingent in virtue of the fact that a future-tense proposition is true. By the same analysis, God's knowing that proposition is just as contingent as the proposition itself. Up until t_n it is possible that God be knowing $\sim p$, even though He knows p . After S is instantiated, however, it is no longer possible that God be knowing $\sim p$.

That leads to the second Aristotelian objection: since God's foreknowledge is a fact about the past, is it not now temporally necessary, such that if "God foreknew p " is true then it is temporally impossible that "God foreknows $\sim p$ " is true? If so, is not p necessarily true, since it can no longer be false? Ockham responds that "God foreknew p " is not temporally necessary.⁵⁴ He argues that in the case in which an ostensibly present-tense proposition is equivalent to or depends on the truth of a future-tense proposition, then the past-tense version of that proposition is not temporally necessary. Thus, because "God foreknows p " depends for its truth upon the truth of p , "God foreknew p " is not necessary. The reasoning appears to be this: p depends for its truth upon the state of affairs described by p obtaining at some time in the actual world. Prior to the instantiation of that state of affairs, it is possible that either it or its opposite will obtain. Therefore, prior to t_n either p or $\sim p$ is possibly true. Since God knows only true propositions, His knowledge will be determined by which is true. That God foreknows p is therefore dependent on the truth of p , which in turn depends on the corresponding

state of affairs obtaining at t_n . Therefore, at all times prior to t_n , whether past or present, God's knowing p is a temporally contingent state of affairs. It is equally possible that He not be knowing p . That is to say, if S obtains (tenselessly) then God has always known p ; if not- S obtains (tenselessly) then God has always known $\sim p$. But prior to t_n it is a contingent matter which state of affairs obtains; similarly, it is contingent prior to t_n whether God has always known p or $\sim p$.

Hence, neither of Aristotle's fatalistic difficulties removes the contingency of the future. Propositions about future contingents are true or false, but can prior to the actualization of the relevant states of affairs possess the opposite truth value. God's foreknowledge of the future is equally temporally contingent, since it is determined in its content by what will be the case.

Third Objection

As for the third objection, which alleges to prove God's knowledge would be limited if He knew only one part of a contradiction, Ockham grants that if God were to cause one part of a contradiction in such a way that He could not cause the other, He would have limited power.⁵⁵ The same holds for His knowing. But He does not cause or know in this way. It is a contingent matter whether He knows p or $\sim p$ up until the actualization of the relevant state of affairs. He cannot know both p and $\sim p$, but this is no limitation, since it involves knowing a contradiction, which is absurd. Since God can know p or $\sim p$, His knowledge is not limited by being determinate.

Fourth Objection

Finally, the fourth objection breaks no new ground. Future contingent propositions are determinately true or false, but contingently so such that though p is true it can be and can ever have been false.

With regard, then, to Ockham's treatment of the question of whether God's foreknowledge is determinate, we have seen that for Ockham future-tense propositions are without exception determinately true or false, that is to say, they have specifiable truth values because they are correlated with present-tense propositions which will be true or false based on what obtains in the actual world. Since God is essentially omniscient, He possess innate and eternal knowledge of all true propositions, thereby having determinate knowledge of future contingents. Such determinate propositions and determinate foreknowledge do not entail fatalism because there is an asymmetric relation between them and the

corresponding future states of affairs. Since these states of affairs are not yet instantiated, it is still possible that opposite states be instantiated instead. If they were, then different propositions would be true and God's foreknowledge would be different in content as well. Therefore, prior to the actualization of these states of affairs in the temporal process, it is possible that God's foreknowledge be and have been other than it is. His foreknowledge, therefore, does not entail fatalism. At the same time, however, Ockham confesses that he cannot explain how God can know future contingents certainly and infallibly. We must simply accept on authority that God's foreknowledge is certain and infallible, even if we cannot comprehend how He has such knowledge.

GOD'S CERTAIN AND INFALLIBLE KNOWLEDGE OF FUTURE CONTINGENTS

Objections

In the second article, Ockham deals further with the question of whether God's cognition is certain and infallible. Two objections are presented:⁵⁶

1. The following is a valid argument: God cognized that I would sit down tomorrow, and I shall not sit down tomorrow; therefore, He is deceived. Though that argument is not sound, the following similar argument is sound: God cognized that I would sit down tomorrow, and it is possible that I shall not sit down tomorrow; therefore, it is possible that He be deceived.

2. If God cognized that I would sit down tomorrow, and it is possible that I shall not, then suppose that I do not in fact sit down tomorrow. God is then deceived. Therefore, it is possible that God be deceived.

Replies to Objections

Against these arguments, which are obviously borrowed from Duns Scotus, Ockham responds that he has already proved that God's cognition is certain and infallible. This seems to be an overstatement, since all he did was assert this fact without proof—unless we take him to mean that he has proved *that* God's cognition is certain, though he could not explain *how*.

First Objection

More specifically, in response to the first objection, William grants the validity of the first argument, but denies that the two assertoric premisses can be simultaneously true. For if God cognizes *p*, then it follows that *p* is true, since only the true is known. But the second argument does not

hold good. It would only hold good if the premiss "God cognized that I would sit down tomorrow" is omnitemporally and so necessarily true, regardless of whether the modal premiss be posited in fact or not. Ockham's point is that since what is posited in fact determines what God cognized, the first premiss cannot be simply true without regard to what is posited in reality, for if the contradictory is instantiated then God's knowledge would have been otherwise. Hence, he states that we can reverse the reasoning and infer from "God cannot be deceived" and "It is possible I shall not sit down tomorrow" that "God knows not necessarily but contingently that I shall sit down tomorrow." The objector's argument therefore fails because it is contingently true that God cognized my sitting down, and this proposition can be false and ever have been false.

Adams and Kretzmann have difficulty with this reply because of their interpretation that Ockham distinguishes between God's belief, which is temporally necessary, and God's knowledge, which is temporally contingent.⁵⁷ They claim that Ockham's reply would have been justified had the objector used the word *scivit* rather than *novit*. For on Ockham's view "God knew *p*" is only verbally about the past, whereas "God cognizes *p*" is genuinely about the past and necessary *per accidens*. The objector's argument is therefore sound. Ockham may have, they muse, misconstrued these arguments by interpreting "cognized" as "knew." Now Adams and Kretzmann are certainly correct that Ockham takes these words as synonyms here. He states "...if God *cognized* that I would sit down tomorrow it follows that 'I shall sit down tomorrow' is true, for nothing is *known* unless it is true."⁵⁸ Again, he re-states the first premiss as "God knows...that I shall sit down tomorrow."⁵⁹ But this belies the distinction which they discern in Ockham between God's cognition and knowledge. On their view, Ockham should have agreed with the first objection, since this is precisely his argument to prove the contingency of God's knowledge. The argument could be restated: God believed that I shall sit down tomorrow, and it is possible that I shall not; therefore, it is possible that God's belief is mistaken. In agreeing that God cannot be deceived, that His belief cannot be mistaken, Ockham would undercut the contingency of God's knowledge and thereby undermine his supposed response to fatalism. The argument in this section only makes sense if Ockham is maintaining that God's cognition, like His will, is temporally contingent. Since God cannot be deceived, it follows that if it is possible that I sit down at t_n then prior to t_n it is possible that God not be cognizing my sitting down at t_n . Therefore, one cannot infer from God's cognition of a proposition *p* and the possibility of $\sim p$ that God may possibly be in error in His cognition.

Second Objection

As for the second objection, though the propositions "God cognized I would sit down tomorrow" and "It is possible I shall not sit down tomorrow" are consistent, nevertheless the former is not compatible with the supposition "I shall not in fact sit down tomorrow." Since these two are impossible, the impossible proposition "God is mistaken" follows from them. Therefore, the supposition cannot be made once the truth of the first premiss is granted. Again, this reinforces the view that Ockham is not claiming that God's foreknowledge is contingent because prior to t_n His cognition or belief can turn out to be false, that is, not to be knowledge. It is impossible that God be mistaken. Ockham's point is rather that since God's cognition is based on what will obtain, it follows that if it is possible that something else will obtain than what in fact will obtain, then it is possible that God's cognition be other than it in fact is.

The curious thing about this section is that Ockham has thus refuted arguments purporting to show that God's knowledge is not certain and infallible, arguments which resemble closely the very difficulties which seemed to confound him earlier. He has shown that God cannot possibly be deceived and that His knowledge is contingent. If this is not enough to prove the certainty and infallibility of His knowledge, then why include it under this article? But if it is enough, why the earlier confession that he cannot explain how God knows future contingents with certainty? Once again, one is led to wonder if Ockham's problem was not primarily with the means of God's knowledge, rather than with the compossibility of that knowledge with certainty and infallibility.

GOD'S NECESSARY KNOWLEDGE OF FUTURE CONTINGENTS

Arguments for Necessity

Finally, Ockham deals with the question of whether God has necessary knowledge of future contingents. He presents five arguments which purport to prove that what God knows He knows necessarily.⁶⁰

1. Necessity is not posited in God except in the sense of immutability. So whatever is in Him immutably is necessarily in Him. Now God knows *A* immutably and, therefore, necessarily.
2. Everything possible is mutable; therefore everything immutable is necessary. Since God's knowledge is immutable it is also necessary.
3. Whatever can be in God is of necessity God, since He is immutable. But the property of "knowing *A*" can be in God. Therefore it necessarily is in God.

4. Every absolute perfection is in God necessarily. But “knowing *A*” is an absolute perfection, for God would not be perfect if He did not know *A*. Since He could be imperfect only in case He lacked some absolute perfection, “knowing *A*” must be an absolute perfection and therefore in God necessarily.

5. “Everything that God knows will be will necessarily be” is a *de necessario* proposition. “*A* is something that God knows will be” is true from eternity. Therefore, “*A* will necessarily be” is a *de necessario* proposition which follows.

Refutation of Arguments

In order to answer these arguments, Ockham distinguishes two ways in which it may be said that God’s knowledge is necessary.⁶¹ In the first place, one may speak of God’s knowledge as the medium by which future contingents are known. In this sense, God’s knowledge is necessary, “since the divine essence itself is one single necessary and immutable cognition of all things, ...necessary and contingent.”⁶² We have seen that for Ockham God possesses eternally and essentially knowledge of all true propositions. To call His knowledge “necessary” in this sense seems therefore roughly synonymous to “certain”. In the second place, one may speak of God’s knowledge in terms of its content. In this sense God’s knowledge is the set of all true propositions known by Him. Ockham asserts that this knowledge is contingent: other propositions could have constituted God’s cognitive set. “For just as this or that future contingent contingently will be, so God knows that it contingently will be, for if He knows it He can *not* know that it will be.”⁶³ It must be kept in mind that Ockham is not maintaining merely that it is logically possible that God know other propositions; rather he no doubt means temporally possible in that prior to any given moment any number of future contingent propositions which are true are possibly false and that God’s knowledge of them therefore is contingent and could be other than it in fact is.

In response, then, to the first objection, Ockham grants that there is no necessity in God other than immutability. But he denies that immutability entails necessity—in the sense of necessity *per accidens*. For future contingent propositions are immutable, in that if they are true, they cannot subsequently be false. As I noted earlier, Ockham means that prior to the actualization of their corresponding states of affairs they are immutable; for at that moment the true future-tense version becomes forever after false. Ockham’s point is that with reference to some future event at t_n , it cannot be the case that p is true at t_{n-5} and $\sim p$ is true at t_{n-1} . But a future-tense proposition can, prior to t_n , fail to have been true at all, though it is true. Similarly, God’s knowledge of future contingents

from eternity past is immutable, but prior to the actualization of those contingents it could be otherwise. In this sense, God's knowledge is necessary only insofar as it is knowledge of past and present events which are not determined by outstanding events.

The answer to the second objection is, thus, already in hand: one cannot infer necessity from immutability.

Ockham rebuts the third argument by contending that only that which can be in God essentially is in God necessarily. But "knowing *A*" is merely a concept or name that can be predicated of God or not. Compare the name "Lord" which is predicated of God only in case a creation exists. Thus, "knowing *A*" is contingently predicated of God.

This also supplies the answer to the fourth difficulty, for since "knowing *A*" is predicated contingently of God it is not an absolute perfection. God's not knowing *A* would not imply an imperfection in God in the case that *A* is false. If *A* is true and God did not know *A*, He would indeed be imperfect, but the conclusion does not follow only from "God does not know *A*" — which is what the argument requires.

As for the fifth argument, the proposition "Everything God knows will be necessarily will be" is false in the divided sense (*de re*). In the composite sense it is true, but then the conclusion does not follow because the second premiss "*A* is something that God knows will be" is not temporally necessary: it is possibly false prior to some t_n . It is interesting to see how Ockham in this response takes up again in answer to this traditional fatalistic difficulty the reply which Aquinas rejected in favor of God's timeless eternity. The proposition "God knows [or knew] *A*" is temporally contingent because it is infected with futurity: God's knowing *A* is determined by some state of affairs which is still outstanding and is thus contingent. Hence, no appeal to God's timelessness need be made.

Ockham thus maintains that God's knowledge of future contingents is held by Him immutably from eternity past. He knows now and has always known that *x* will happen. Throughout all time He knows "*x* happens at t_n " is tenselessly true and this knowledge can never change. Nonetheless, it is not necessary. For not only is it logically possible for God's knowledge to be other than it is, but in a mysterious sense it is, prior to t_n , temporally possible that it be other than it is. Such possibility involves no possibility of change in God's knowledge; rather it involves the possibility of the entire past history of God's knowledge being other than it is. This is because God's knowledge is asymmetrically determined to be what it is by the future contingents themselves, and so long as they are still outstanding, it is possible that they not be actualized. Therefore, it is possible that God's knowledge be other than it is. Once they are instantiated, it is no longer possible for their opposites to exist; hence, it is no longer possible for God's knowledge to be other than it is.

SUMMARY

Ockham has therefore argued that God's knowledge of future contingents is determinate, certain and infallible, and contingent but immutable. Such foreknowledge does not entail fatalism, for prior to a future contingent's coming to be it is equally possible for it to exist or not, and far from God's foreknowledge determining it to exist, God's foreknowledge, so to speak, hangs in the balance until the instantiation of the future contingent decisively tips one side of the scales.

CHAPTER SEVEN

LUIS MOLINA

Undoubtedly one of the most provocative instances of creative genius in the long history of philosophical and theological reflection on divine omniscience is Luis Molina's development of his doctrine of *scientia media* (middle knowledge). A Spanish Jesuit of the Counter-Reformation who had honed his weapons doing battle with Lutherans and Calvinists, Molina (1535-1600) was deeply exercised to avoid the Protestant error of denying genuine human freedom, yet without thereby sacrificing divine sovereignty.¹ According to the Council of Trent in its decree on Justification (1547), the initiative in the process of justification is God's unmerited, prevenient grace, which stirs and solicits the will of man but which may be either accepted or resisted by the human will. Anyone who denies either prevenient grace or the freedom of man is unequivocally condemned. Theologians prior to Molina such as Driedo, Tapper, and Tilet had attempted to reconcile these doctrines by basing predestination on foreknowledge; according to Camerarius God gives grace to those who He foreknows will make good use of it. Peter Fonseca advanced this notion by positing in God a sort of foreknowledge of possible futures prior to His decree of the actual future. Lessius, a professor of theology at the University of Louvain, utilized this notion to explain that God does not give efficacious grace to a man until after He foresees that the man will respond to the divine initiative. It remained, however, for Molina to draft a careful and coherent account of God's middle knowledge as a means of reconciling divine sovereignty and human freedom. Assigned by his superiors to comment on the first part of Thomas Aquinas's *Summa theologiae*, Molina became intensely preoccupied with demonstrating the compatibility of human freedom on the one hand with divine prescience, providence, and predestination on the other. The result of this selective study was Molina's *De liberi arbitrii cum gratiae donis, divina praescientia, providentia, praedestinatione et reprobatione concordia* (1588).

Although Lessius had been exonerated the same year by a papal commission of all charges of Pelagianism and Molina's book had been examined by the Portuguese Inquisition and praised by the official censor, himself a Dominican, the *Concordia* immediately became the subject of heated controversy, the Dominican theologian Domingo Bañez condemning it sharply as contrary to the teaching of Thomas and of

Trent. The next year Molina adjoined an appendix to the *Concordia* in which he responded to the objections of Bañez and other critics. The ensuing debate became so furious that in 1594 Rome intervened and Clement VIII ordered a series of assemblies at Rome (*Congregatio "De auxiliis"*) to examine the *Concordia*. During nearly ten years (1598-1606) these assemblies, first presided over by cardinals, then by the Pope himself, convened 181 times, and again and again condemnation seemed imminent, but each time the Pope drew back. On August 28, 1607, Pope Paul V, faced with an almost unanimous vote of the examiners to condemn 42 propositions of Molina, declared before eight of his cardinals that in his judgement neither could the Dominicans be condemned as Calvinists, since they held that grace perfects rather than destroys human freedom, nor could the Jesuits be condemned as Pelagians, since they held that the initiative in salvation comes not from man, but from God. Therefore, both opinions are permissible within the confines of Catholic doctrine. The victory thus went to Molinism, which has continued along with Thomism as an officially permitted option for Catholic theologians. Unfortunately, Molina himself never lived to see his vindication, for mid-way through the congregations he died, at a moment when his condemnation as a heretic seemed certain.

The continuing dispute between Molinists and Thomists has transpired pretty much in a corner, but since Alvin Plantinga, apparently in ignorance of Molina's views, re-invented the doctrine of middle knowledge in 1974,² the debate has been cast into a broader arena, where it has attracted greater attention on the part of non-sectarian philosophers of religion.³ This increased interest will no doubt be greatly abetted by the appearance of Freddoso's wonderfully limpid translation of disputations 47-53 of the *Concordia*.⁴ The appearance of this translation will be especially helpful in drawing attention to Molina's own views, which have often been modified or distorted by both Molinists and Thomists after him.⁵

DIVINE FOREKNOWLEDGE AND FUTURE CONTINGENTS

Molina presents his theory of divine middle knowledge as the key to resolving the traditional riddles concerning divine foreknowledge and future contingents: (1) how can God know infallibly causally indeterminate future events, and (2) once divine foreknowledge of a future event is posited, how is theological fatalism to be avoided?

*Infallible Knowledge of Future Contingents**Rejection of Timeless Vision View*

In handling the first problem, Molina, while defending against Scotus Aquinas's doctrine of divine eternity and the presence of all things to God in eternity,⁶ nevertheless rejects Thomas's solution that God's knowledge of events future to us is based on their presence to Him in eternity. He recognizes that according to Aquinas, contingent things as present in their existence to God in eternity can be known by God with a certain and infallible cognition and that persuasive evidence exists to show that Aquinas did not accept any account of divine foreknowledge on the basis of the divine ideas.⁷ Nevertheless, Molina asserts that in his opinion Aquinas, if asked, would affirm that it is not solely on the basis of temporal things' presence to God in eternity that He knows future contingents.⁸ For to deny that God can know future contingents on the basis of the divine ideas alone is dangerous to the faith, and Thomas would certainly not wish to hold to any doctrine which detracted from the dignity of God's knowledge or contradicted the faith.

In Molina's opinion the presence of things to God in eternity "contributes nothing... either toward establishing the certitude of the divine foreknowledge concerning future contingents or toward reconciling the contingency of things with divine foreknowledge."⁹ He provides three arguments in support of this assertion. (1) Such a theory would entail that things exist in eternity before they exist in time, which is impossible. One might think that Molina does not mean by such a bold assertion "before" in a temporal sense, but in the conditional sense in which, as we shall see, he claims that God's knowledge of a thing is prior to its existence in eternity. Perhaps he is here arguing that on the timeless vision view a thing's existence in eternity is conditionally prior to its temporal existence. But his argumentation does not support such a reading. For he goes on to argue against future things' now existing in eternity before they come to be in time. On Molina's view, when things are produced in time, they are simultaneously being produced in eternity; therefore, things cannot exist in eternity before they exist in time. Unfortunately, Molina does not explain why the timeless vision theory entails the opposite, since on this view the events in eternity are timelessly present to God regardless of when they are produced in time. In any case, Molina goes on to add that if things exist in eternity before they exist in time, contingency is obliterated; for if the things already exist before they come to be in time, then they cannot fail to come to be. If they could fail to come to be, then their prior existence in eternity is so unstable that the certainty of God's knowledge based on them would

be undermined. (2) If something is a future contingent, then it is able not to exist in eternity; so the presence of things in eternity cannot be the source of God's knowing with certainty things which are contingent in time. On Molina's view, eternity does not yet exist as corresponding to future time because the future time to which it would correspond does not yet exist. Employing the familiar illustration of a circle, Molina asserts that just as the center of a circle, while it is being drawn, does not correspond to points on the circumference yet to be drawn, so indivisible eternity corresponds, not to the whole of time, but to the part of time which has elapsed. It is difficult to reconcile this thesis with Molina's earlier statements in refutation of the Scotist objections to timeless eternity. There he claimed that future things exist in the indivisible now of eternity, which embraces the future time in which they will exist. Here eternity seems to mean a changeless, undifferentiated duration which corresponds only with the past and present. Indeed, in responding to a further Scotist objection in this disputation, Molina seems to reduce eternity to sempiternity, in asserting that the essential difference between eternity and aeviternity lies in the fact that aeviternity is contingent upon God's conservation whereas eternity has infinite duration from itself.¹⁰ This difference has nothing to do with the temporal or atemporal properties of the two, but only their contingency. In any case, Molina seems to think that because a future contingent is able not to be present in eternity, this precludes the certainty of God's knowledge of it, since it is possible for it not to occur. (3) If things exist in eternity before they exist in time, then at the present moment there exists an actual infinity of things in eternity, which is absurd. Since in the after-life events will be prolonged forever, an infinite number of such events would be now present to God in eternity. But the existence of an actually infinite number of things is, as Aristotle argued, impossible.

Molina concludes that it is therefore technically improper to speak of *scientia visionis* of future events, since they do not yet exist to be seen. Rather God's knowledge of future contingents is more like God's *scientia simplicis intelligentiae*, for it is of objects which do not exist.

Re-interpretation of the Theory of Divine Ideas

Thus Molina presents his own theory of the basis of divine foreknowledge as a sort of extension of Bonaventure's doctrine of divine ideas.¹¹ Under Molina's radical re-interpretation of that doctrine, the divine ideas present to God not only all *possibilia*, but also all *futuribilia*, that is, states of affairs which not merely *could* obtain but in fact *would* obtain under the hypothesis that certain other states of affairs already obtained. By choosing to actualize a certain order of hypothetical states, God thus knows what further states will be actual as a consequence. Molina explains,

It is not simply because things exist outside their causes in eternity that God knows future contingents with certainty; rather, before (in our way of conceiving it, but with a basis in reality) He creates anything at all, He comprehends in Himself—because of the depth of His knowledge—all things which, as a result of all the secondary causes possible in virtue of His omnipotence, would contingently or simply freely come to be on the hypothesis that He should will to establish these or those orders of things with these or those circumstances; and by the very fact that through His free will He established in being that order of things and causes which He in fact established, He comprehended in His very self and in that very decree of His all the things which were in fact freely or contingently going to be or not going to be as a result of secondary causes—and He comprehended this not only prior to anything's existing in time, but even prior (in our way of conceiving it, with a basis in reality) to any created thing's existing in the duration of eternity.¹²

Divisions and Priority in Divine Knowledge

Several notions in this account merit comment. The notion of a sort of conceptual, atemporal priority within the knowledge of God is nothing new. Scotus, it will be remembered, posited three moments in God's timeless knowledge of future contingents: (i) God's knowledge of contradictory pairs of all logically contingent propositions, (ii) God's decision to actualize the state of affairs described in one disjunct of each contradictory pair, and (iii) God's knowledge of all logically contingent propositions which as a result are in fact true.¹³ Similarly, Aquinas posited three consecutive aspects of God's timeless act of knowledge: (i) *scientia simplicis intelligentiae* by which God knows all the possibles, (ii) *scientia approbationis* by which God decides to create certain of the possibles, and (iii) *scientia visionis* by which God knows what exists at any time in the actual world.¹⁴ Molina, too, posits three consecutive moments in God's knowledge of the actual world. He holds the relation of priority among them to be conceptual (*nostro modo intelligendi*); not only are we not to admit of any temporal priority in God's knowledge, but Molina refuses to allow even Scotus's theory of natural instants in God's knowledge.¹⁵ On the other hand, this relation of priority is not therefore a mere figment of the imagination (*cum fundamento in re*). What Molina has in mind, I think, is a relation of conditionship between the various aspects of God's knowledge; God can have a certain sort of knowledge only upon the condition of His having a certain other type of knowledge. The latter sort is thus in a sense prior to the former. Molina thus contrasts God's knowledge on which a decision of the divine will is based with God's knowledge of the decision:

...this priority is posited only in view of the fact that because of the dependence which an act of will has on the intellect's knowledge, and not

vice versa, the one thing is conceived by us as presupposed when the other thing is still not yet conceived—and yet the two are always conjoined in reality.... despite the fact that the divine knowledge, to the extent that it is a prerequisite for the act of the will, is conceived of by us as not yet having adjoined to it a knowledge of the determination of that same act, it does not follow that there is in reality a moment when it exists without that knowledge....¹⁶

Since one aspect of God's knowledge is a "prerequisite" for another aspect, such that a relation of "dependence" exists between them, the one aspect may be justifiably said to have a "priority" to the other.

Natural vs. Free Knowledge. Now Molina's first and third sorts of divine knowledge correspond with Thomas's *scientia simplicis intelligentiae* and *scientia visionis*, and Molina agrees that between these a decision of the divine will interposes. Precisely in virtue of this act of divine will, Molina prefers to call God's knowledge prior to His decision "natural knowledge" and His knowledge subsequent to that decision "free knowledge." God's natural knowledge comprises not only all the possibles taken as individual entities but also all possible complexes of such entities and their actions:

Through this type of knowledge He knew all the things to which the divine power extended either immediately or by the mediation of secondary causes, including not only the natures of individuals and the necessary states of affairs composed of them, but also the contingent states of affairs—through this knowledge He knew, to be sure, not that the latter were or were not going to obtain determinately, but rather that they were able to obtain and able not to obtain, a feature which belongs to them necessarily and thus also falls under God's natural knowledge.¹⁷

God's natural knowledge thus affords Him a knowledge of every contingent state of affairs which could hypothetically obtain: "...the divine ideas represent to God *naturally*, before any free determination of His will, every future contingent state of affairs *under that hypothesis and condition*."¹⁸ A central feature of God's natural knowledge is that the content of this knowledge is essential to God; indeed, this is why such knowledge is natural. It does not depend on God's will, but necessarily belongs to God's omniscience.

On the other hand, God's free knowledge is that aspect of His omniscience which comprises His knowledge of this existent, contingent world. This knowledge is posterior to the free decision of God's will to create, to instantiate one of the possible orders known by His natural knowledge. In Molina's words,

The second type is purely *free* knowledge, by which, after the free act of His will, God knew *absolutely* and *determinately*, *without any condition or hypothesis*, which ones from among all the contingent states of affairs were *in fact* going to obtain and, likewise, which ones were not going to obtain.¹⁹

Since his knowledge is posterior to the decision of God's will and since God's decision to create this world is free, it follows that the content of free knowledge is not essential to divine omniscience, but is contingent upon which world God in fact creates. Had God created different worlds or even no world at all, the content of His free knowledge would have been different.²⁰ So while it is essential to God to have free knowledge, the content of what He freely knows is contingent upon which world He chooses to create.

Now between these two moments of divine knowledge is interposed the act of the divine will, which Aquinas denominated *scientia approbationis*. According to Molina, God's act of will reflects "an absolutely complete and unlimited deliberation"²¹ and results in one contingent order being instantiated by God freely rather than some other. But for Molina the act of God's will to create a world is not itself a type of knowledge. Hence, he denies that God's knowledge is a cause of things, except insofar as God's natural knowledge serves as a sort of exemplary cause upon which creatures are patterned and insofar as His third type of knowledge, discussed below, delimits which possible orders of things God is able to bring into existence.²² Since God's willing to create some world is not itself a type of knowledge, Thomas's three types of divine knowledge reduce to two: natural and free knowledge.

Middle Knowledge. But now Molina suggests that there is in fact a third type of knowledge in God which stands in between natural and free knowledge; for want of a better name, Molina calls it simply "middle knowledge." Middle knowledge is that aspect of divine omniscience which comprises God's knowledge, prior to any determination of the divine will, of which decisions of finite wills would be freely made under any hypothetical set of circumstances. Molina writes,

...the third type is *middle* knowledge, by which, in virtue of the most profound and inscrutable comprehension of each free will, He saw in His own essence what each such will would do with its innate freedom were it to be placed in this or that or indeed in infinitely many orders of things—even though it would really be able, if it so willed, to do the opposite....²³

Thus, whereas by His natural knowledge God knows that, say, Peter when placed under a certain set of circumstances *could* either betray Christ or not betray Christ, being free to do either under identical circumstances,²⁴ by His middle knowledge God knows what Peter *would* do if placed under those circumstances.

According to Molina, middle knowledge cannot be reduced to either natural knowledge or free knowledge, but shares features of each. It cannot be reduced to free knowledge because (i) it is prior to any free act of God's will and (ii) the content of divine middle knowledge does not

lie within the scope of His power, so that He cannot control what He knows via such knowledge. These two features of middle knowledge are extremely important. The first implies that God's knowledge of what contingent events would take place under any set of circumstances is a prerequisite for God's knowledge of what will in fact occur in the world. Both God's willing to create a world and His consequent knowledge of what will in fact be actual presuppose and depend upon God's knowing what would occur under any given set of circumstances. He does not, for example, first know what Peter will do in the actual circumstances that will exist and then on this basis know what Peter would have done had he been placed in some other set of circumstances. Rather the opposite is true: prior to God's decision to create any set of circumstances, He knows what Peter would do within any possible order of circumstances; then, given the decision of His will to bring about a certain set of circumstances, God knows what Peter will in fact do. The second feature of middle knowledge follows from the first. Since middle knowledge is prior to the divine will, its content is independent of the divine will and, hence, outside the pale of God's omnipotence. Just as God's knowledge of logical truths is outside His control and is simply given, so, too, His knowledge of what would be the free decisions of created wills under certain circumstances is simply given and outside His control. Of course, God may easily prevent a creature's free decision by not creating that creature at all or by altering the circumstances in such a way as to bring it about that the creature freely decides to do something else; but God cannot annul the fact that if a free creature *were* to be placed in a certain set of circumstances, he *would* choose to do a certain act. Thus, for example, God could prevent Peter's denial of Christ by not creating Peter at all while creating many of the same extra-Petrine circumstances or else by creating a different set of circumstances under which Peter would not have denied Christ. But God cannot control the fact that were He to bring about a certain set of circumstances then Peter would freely deny Christ. Since the content of divine middle knowledge thus depends on what the creatures themselves would do, God cannot control what He knows by His middle knowledge.

On the other hand, neither can middle knowledge be reduced to natural knowledge, though Molina at first introduces it as a sort of natural knowledge.²⁵ For whereas the content of God's natural knowledge is essential to Him, clearly the content of His middle knowledge is not, since creatures are free under certain sets of circumstances to refrain from doing what they would do. While it is essential to God's nature that He have middle knowledge, the content of that knowledge is contingent because creatures could act differently

under identical circumstances. But if that were the case, then the content of God's middle knowledge would be different. As Molina explains, "... if created free choice were going to do the opposite, as indeed it can, then God would have known that very thing through this same type of knowledge, and not what He in fact knows. Therefore, it is no more natural for God to know through this sort of knowledge one part of a contradiction that depends on created free choice than it is for Him to know the opposite part."²⁶

Middle knowledge, then, may be said to be like natural knowledge in that it is prior to the decision of the divine will and outside God's power, but to be like free knowledge in that such knowledge depends on a decision of free will (in this case, however, creatures', not God's) which could be different.

As Molina's original explanation cited above indicates, it is God's middle knowledge which thus supplies the basis for God's foreknowledge of contingent events in the actual world. By knowing what every possible creature would do under any possible circumstances and by willing to establish a world order containing certain circumstances, God knows what will in fact take place in the world. Molina explains,

All contingent states of affairs are...represented to God *naturally, before* any act or free determination of the divine will; and they are represented not only as being *possible* but also as being *future*—not *absolutely future*, but *future under the condition and on the hypothesis* that God should decide to create this or that order of things and causes with these or those circumstances. However, once the determination of the divine will is added..., God knows all the contingent states of affairs with certainty as being future *simply and absolutely*, and now *without any hypothesis or condition*.²⁷

For Molina an order of things and causes constitutes a possible world which God instantiates progressively in time, while sets of circumstances are less than maximal states of affairs within the world. By knowing what free creatures would do under any possible circumstances, God is, so to speak, able to construct a possible world containing circumstances caused directly by God, decisions wrought by the free creatures God wills to create, and further circumstances brought about by the free decisions of creatures. By means of His middle knowledge, God is able to construct a possible world which is within His power to actualize and which is consonant with His will. By taking into account the free decisions of creatures in His planning, God in willing to actualize a certain world does not violate the freedom of creatures in that world, though He knows with certainty what they will do:

...the explanation for God's knowing with certainty which part of any contradiction among those contingent states of affairs dependent on free

created choice is going to obtain is not a determination of the divine will by which God turns and determines created free choice to one or the other part, but is instead a free determination by which God decides to create free choice in this or that order of things and circumstances. Nor do we believe that this determination is *by itself* a *sufficient* explanation for God's knowing with certainty which part of each contradiction among those states of affairs is going to obtain; rather the sufficient explanation is the determination of the divine will *along with* God's comprehension in His essence of each created free will through His natural [i.e., middle] knowledge, a comprehension by means of which He knows with certainty, before the determination of His will, what such and such a free will would do in its freedom on the hypothesis and condition that God should create it and situate it in this particular order of things—even though it could, if it so willed, do the opposite, and even though if it were going to do the opposite, as it is able to, then God would have known *this* in His essence through that very same knowledge and comprehension, and *not* what He in fact knows is going to be done by that free will.²⁸

By positing middle knowledge in God, Molina is thus able to offer an innovative and provocative account of how it is that God foreknows future contingents.

Medium of Divine Foreknowledge

A second notion in Molina's account of God's knowledge of future contingents that merits comment is his claim that God knows future contingents in Himself. Molina wishes to insist as strongly as Aquinas that God does not acquire His knowledge from external sources. He asserts, "...God acquires no knowledge *from things* but instead knows and comprehends everything He knows in His own essence and in the determination of His own will...."²⁹ In His essence He knows the content of His natural and middle knowledge, while the determination of His creative will furnishes the basis of His free knowledge. This does not mean that things come to pass because God foreknows them; rather God foreknows things because they will come to pass. This is not to say that events are the *cause* of God's foreknowledge, for His foreknowledge is uncaused. Rather this means that the *explanation* of why God's foreknowledge is as it is and not otherwise is to be found in the fact the events will come to pass given the appropriate circumstances.³⁰ True, the content of God's middle knowledge would be different if it were the case that creatures would choose differently than they choose under given sets of circumstances; but God does not acquire this knowledge from any source *extra se*. On Molina's account, then, God's knowledge of the world is entirely innate; His knowledge is not acquired, but is based wholly on a knowledge of His own nature and will.

Supercomprehension

A third notion that deserves to be highlighted is Molina's concept of supercomprehension. It might be asked how it is that by knowing His own essence alone God is able to have middle knowledge concerning what free creatures would do in any situation. Molina's answer to this question is alluded to in the words of the initial citation above, "because of the depth of His knowledge." According to Molina, God not only knows in His own essence all possible creatures, but His intellect infinitely surpasses the capabilities of finite free wills so that He understands them so thoroughly that He knows not only what they *could* choose under any set of circumstances, but what they *would* choose. He writes,

Through His natural knowledge God comprehends Himself, and in Himself He comprehends all the things which exist eminently in Him and thus the free choice of any creature whom He is able to make by His omnipotence. Therefore, before any free determination of His will, in virtue of the depth of His natural [i.e., middle] knowledge, by which He infinitely surpasses each of the things He contains eminently in Himself, He sees through to what the free choice of any creature would do by its own innate freedom, given the hypothesis that He should create it in this or that order of things.... For it would be insulting to the depth and perfection of the divine knowledge—and indeed impious and not at all compatible with so great a comprehension of the free choice of each creature—to assert that God is ignorant of what I would have done by my freedom of choice if He had created me in some other order of things....³¹

In another place Molina speaks of "His immense and altogether unlimited *knowledge*, by which He comprehends in the deepest and most eminent way whatever falls under His omnipotence, *to penetrate created free choice* in such a way as to discern and intuit with certainty which part it is going to turn itself to by its own innate freedom."³² Because His intellect is infinite whereas a free creature is finite, God's insight into the will of a free creature is of such a surpassing quality that God knows exactly what the free creature would do were God to place him in a certain set of circumstances.

The seriousness with which Molina took this notion of supercomprehension is evident in the fact that it is on this basis that he denies that God has middle knowledge of His own actions. Molina's motivation for this surprising denial is his self-confessed desire to preserve God's freedom. For Molina believes that if God had middle knowledge of His own actions, that is to say, if God knew what He would do under any circumstances prior to the determination of His own will, then God would not be free to will whatever He wished under those circumstances.³³ Molina proceeds to explain that there is a vast difference

between a subject's knowing via middle knowledge what some other subject will freely do and a subject's foreknowing via middle knowledge what he himself is going to freely choose. For the first case is in no way prejudicial to the freedom of the other subject; but Molina cannot see how a subject's knowing through middle knowledge what he himself will choose can be compatible with that same subject's freedom.

For in the prior moment at which it knew this fact *quasi-naturally* and not freely, it did not have the power to know the contrary; in fact, since it knew the relevant part of the contradiction quasi-naturally and not freely, it follows that as long as there is preexisting knowledge of this sort, then it involves a contradiction to will or to have known the contrary. For in that case either God would be mistaken or there would be something such that, after having known it, He would never have known it—which involves a contradiction.³⁴

Now at first blush, Molina's reasoning might appear to be this: if God knows via middle knowledge what He would do under any circumstances, then in willing those circumstances, He knows what He will do and cannot therefore do the contrary; for if He were to will the contrary, then either His middle knowledge would have been incorrect or else He would have altered the past such that He never knew what He has always known. Perhaps this is his meaning; but then it is difficult to see why his solution to theological fatalism, to be discussed below, would not also apply to this case. Perhaps his emphasis on the difference between the case of two subjects and the case of one subject indicates that his point is that in the case of one subject's knowledge of himself, as opposed to the case of one subject's knowledge of another, deliberation over one's decisions becomes impossible once he is or knows he will be under a certain set of circumstances, since he already knows what he shall do under those circumstances. But the wording of Molina's argument does not refer to deliberation or its necessity for freedom.³⁵ Rather a closer reading of the argument suggests that the problem for divine freedom arises from the fact that, as we saw earlier, God does not on Molina's account have control over the content of His middle knowledge, which is in that respect like natural knowledge; hence, he says, "For in the prior moment at which it knew this fact *quasi-naturally and not freely*, it did not have the power to know the contrary...." Therefore, in every circumstance God has no power to do the opposite of what He knows He would do by His middle knowledge. Were He to do the opposite, then either His middle knowledge would be erroneous or else God would change the past. This problem does not arise in God's middle knowledge of another person's decisions because that other person does have control over what God knows about his decisions via middle knowledge.

But if a desire to safeguard God's freedom motivates Molina to deny divine middle knowledge of God's own decisions, it is clearly his doctrine of supercomprehension which grounds that denial. For since God is in every respect infinite, it follows that His intellect does not surpass His will so as to know its free decisions:

...we...do not concede that through His natural or middle knowledge (which we deny of Him in this regard) God sees, before the determination of His will, which part *He Himself* is going to choose. For in God the intellect does not surpass the *divine* essence and will in depth and excellence in the way that it does far surpass created essences and wills. Therefore, just as human beings and angels do not know, before the determination of their own wills, which part they are going to turn themselves toward, since their intellects do not surpass their essence and will by an infinite degree, so too neither does God know, before He determines His own will, which part it is going to be turned toward.³⁶

Since God's intellect does not infinitely exceed His will as it does created wills, God's insight into His own will does not penetrate to its free decisions as it does for created wills. Now someone might object that in order to know the free decisions of the will it is sufficient to have a full comprehension of the will, which God certainly has of His own will, since an infinitely knowing intellect can comprehend an infinitely knowable will; *supercomprehension* is not necessary. But Molina responds that free decisions of the will exceed the nature of the subject willing them; that is to say, a subject's nature does not determine which decision the will shall make—otherwise, the decision would not be free and contingent. Therefore, even complete knowledge of a free subject's nature will not yield knowledge of his free decisions: "...in order to know these things it is not sufficient that the knowing faculty be equalized with the source of the contingency of those things, or that there be a comprehension of this source; instead, what is required is an *absolutely profound and absolutely eminent comprehension* of this source, a comprehension such as is found only in God with respect to the free choice of all His creatures."³⁷ Since God's intellect does not super-comprehend His own essence, all God knows by His middle knowledge concerning His own actions is what He *could* do under any conceivable circumstances.³⁸

Molina's doctrine has the interesting result of introducing a great deal more uncertainty into God's middle knowledge than would exist if He knew what He, as well as creatures, would do under any circumstances. If He possessed middle knowledge of His own decisions, He would be able to know from an initial set of circumstances exactly how each world order would come to pass. But since He does not know how He himself will act and re-act within the circumstances brought about by Himself and free creatures, there are an infinite number of world orders contain-

ing the same initial conditions, for God may freely decide to act one way or another at any point. Perhaps Molina interpreted this to mean that God's will has therefore infinitely many options which He would not have had, had He middle knowledge of His own decisions. Since God would in the latter case know even which initial set of circumstances He would create, perhaps Molina believed that God would then be left with only one option, which is, of course, not an option at all, but subverts the divine freedom. By his doctrine of supercomprehension, however, Molina is able to block this unwelcome conclusion.

But if God does not have middle knowledge of His own actions, Molina hastens to add that that does not imply that God is ignorant of what He would do under circumstances other than those which exist in the actual order of things. Rather such knowledge is part of His *free* knowledge. It is one thing, says Molina, to claim that God does not know via middle knowledge what He is going to do, and a different thing to claim that God does not know what He would have done had other circumstances obtained.³⁹ Molina does not make the second claim, for by this free will God simultaneously decided not only what He will do in the actual world but also what He would do in any other world:

For that free act regarding the things which are able to be done by God... freely determined itself to one part of a contradiction with respect to all possible objects at once, not only (i) by freely establishing those things which he decided to bring about or to permit and by freely deciding not to bring about or permit the rest, but also (ii) by also deciding which things He *would have* willed on any hypothesis that could have obtained and did not obtain.⁴⁰

This serves to underline one of the key features of middle knowledge: it is not simply knowledge of counterfactual conditionals, for Molina agrees that God has such knowledge even of conditionals concerning His own decisions; rather it is knowledge of subjunctive conditionals prior to any determination of God's will and to God's knowledge of other true, contingent propositions. Molina denies that placing counterfactual knowledge of His own decisions in God's free knowledge rather than His middle knowledge implies any imperfection in God, for the one aspect of knowledge is only conceptually prior to the other; in reality there is no time at which God does not possess all the knowledge an omniscient being must have.

In summary, then, divine omniscience though eternal and complete, can be conceptually differentiated into three types of knowledge which are ordered according to a sort of conditional priority. Most fundamental is God's unconditioned natural knowledge which includes His knowledge of all logically possible states of affairs and possible maximal orders.

Posterior to this is God's middle knowledge, which serves to delimit the possible states of affairs to those which would become actual through the free decisions of creatures should God choose to actualize certain sets of circumstances which include them and to those maximal orders that could obtain should God freely decide to act in one way or other. God then deliberates which order He shall instantiate, including what decisions He will take and what decisions He would take under other circumstances, and freely chooses to create a certain world order. Finally, then, on the basis of His decision to create some world order, God knows every detail about that order, not only the circumstances He will directly bring about and the decisions He will make, but also the free decisions which creatures will make and the contingent circumstances which will result in consequence of those decisions. In this way God possesses an infallible and certain knowledge of future contingents.

Proof of the Middle Knowledge Position

What proof does Molina offer for the truth of this doctrine? He presents four considerations.⁴¹ (1) The Scriptures make it clear that God knows which human free decisions and consequences would result under circumstances which will not in fact obtain. Molina appeals to the account of David and Saul at Keilah (1 Sam. 23:10-12) and Jesus's woes upon Chorazin and Bethsaida (Mt. 11:21). He also interprets Wisdom 4.11, 14 to mean that God takes certain persons from this life prematurely because He knows that they would fall into sin if allowed to live longer. (2) God's infinite knowledge is so perfect and so surpasses finite creatures that He must have middle knowledge of their free acts. Middle knowledge belongs to God in virtue of His perfection, which is unlimited in every aspect.⁴² Quoting Augustine, Molina affirms that if middle knowledge did not belong to God, He would not be God. (3) God does not acquire His knowledge from things, but knows all things in Himself and from Himself. This argument is actually directed against the timeless vision view, which appears to make external things the source of God's knowledge of them. (4) Providence and predestination presuppose middle knowledge. According to the doctrine of God's providence, God preordained and arranged all things to suit His purposes. But how could this be done for contingent causes apart from middle knowledge of what they would do under certain circumstances? Without middle knowledge of such contingent causes, God could not know how to arrange the means in order to reach His ends. Things would just happen by chance, as it were, and without the benefit of middle knowledge God would just find out from their existence how things turn out, which is,

opines Molina, plainly the height of absurdity and impiety. Similarly, how can God predestine persons acting freely unless He has middle knowledge? Only by knowing who would freely respond to His grace can God predestine certain persons to glory without robbing them of freedom. Molina's doctrine of predestination is very subtle, and we shall have occasion to examine it more closely in the sequel. On the basis, then, of these arguments, biblical, philosophical, and theological, Molina affirms divine middle knowledge as a basis for God's knowledge of future contingents.

Reconciliation of Foreknowledge and Contingency

If divine middle knowledge serves as a basis for God's foreknowledge of future contingents, it also serves to reconcile divine foreknowledge with future contingency.⁴³ The problem posed by theological fatalism is that God's foreknowledge, being fixed and determined, seems incompatible with the genuine contingency of future events.

Rejection of Ockhamist Solution

Now, Molina observes, there is a solution to the problem of theological fatalism which is widespread in the Church, but which Molina finds unsatisfactory. According to this view, Peter, say, is able to sin or to refrain from sinning at a certain point despite the fact that God foreknows that he will sin. For were he to refrain, then God would at that point bring it about that He had never foreknown that Peter was going to sin, but instead that He had always foreknown that Peter was going to refrain. The basis for this claim takes two forms. Some theologians hold that in virtue of God's timeless eternity all events are simply present to Him, and as such are susceptible to being otherwise in virtue of the divine freedom—there is for God no necessity imposed by the past, but He is as free in His timeless present to be causing the opposite effects as I in my temporal present am free to be causing different effects. On the other hand, some theologians limit God's power over the past to aspects of divine volition and cognition which have dependence relations on future contingents which are known or willed—on this view, God is not able to bring it about that just any past event has never occurred. Both groups insist on the further distinction between the composed and divided sense of a proposition in order to preserve future contingency in face of divine foreknowledge. In the composed sense it is false that "Peter's sin which is foreknown by God is able not to occur," but in the divided sense it is true that "Peter's sin, which is foreknown by God, is

able not to occur," and this for two reasons: (i) if Peter were in fact not going to sin, then God would never have foreknown his sin, and (ii) if he does not sin, God will at that moment bring it about that from eternity He foreknew that Peter was not going to sin.

As Freddoso remarks, while Molina has no problem with (i)—indeed, he insists on it—, he has great difficulties with (ii). According to Molina, God's foreknowledge from eternity is now so necessary that He is no longer in any way capable of bringing it about that He did not know something. For there is obviously no such thing as power over the past, and God cannot change. It is of no avail to appeal to God's timeless present in order to evade the necessity of the past, for even in the present one's ability to do otherwise concerns only what Scotus called the "first natural instant," but in the second instant of nature, the decision is made and cannot be otherwise. Hence, even in God's timeless present, His freedom to do otherwise concerns only the first natural instant, but once He has determined His will in eternity, it cannot be otherwise, since God is immutable.

As his arguments below make plain, Molina's real difficulty was, I think, with using backward causation as a means of reconciling divine foreknowledge and future contingency. He thought it absurd to say that at a point in time God retroactively brings about the past, and especially to say that, having believed one thing, God has the power to retroactively bring it about that He never believed it. He writes,

Our opponents...hold that it is on the following basis that freedom of choice and the contingency of things...are reconciled with divine foreknowledge: viz., that if a thing is going to turn out otherwise, then when it actually occurs, God himself will bring it about that from all eternity He foreknew none other than that very thing which has occurred. For this is as if (i) God acquired knowledge of future contingents from the very occurrence of things, and as if (ii) before the event there was no more certitude in the divine knowledge than there is in an object that is still contingently future, and as if (iii) God's knowledge did not from eternity have in itself a fixed determination to one part of a contradictory pair of future contingents *before* the thing received that same determination in time when it was posited outside its causes.⁴⁴

But such an account is altogether incompatible with the perfection and certainty of the divine knowledge.

Molina presents four arguments against a retrocausal account of divine foreknowledge of future contingents:

1. Such an account would imply that God's power over the past extends even to effects that have already been produced by their causes, the impossibility of which even the proponents of this account admit. On this account, for example, God is able today to bring it about that He

never created the world, since His volition to create the world is under His retrocausal influence. But this is obviously absurd.

Molina elucidates his reasoning against God's having power over past effects which have already been produced by their cause in question 25 of his *Commentaria*, to which he refers the reader.⁴⁵ In this section he presents four arguments against God's having such power. (a) It is contradictory to say that something existed and that then God brought it about that it never existed. Molina acknowledges that his opponents would retort that it is logically impossible to have such power only in the composite sense; in the divided sense, there is no contradiction. That is to say, while it is logically contradictory to assert both that, say, Adam existed and God brings it about that Adam never existed, there is no logical contradiction in asserting simply that God brings it about that Adam never existed, for in the latter case Adam did not exist in the first place. Given the fact that Adam existed, a logical contradiction arises only in saying that God brings it about that he never existed; but there is no contradiction in asserting that God is *able* to bring it about that Adam never existed. Molina, however, rejects this answer. He states that in order for God to now bring it about that Adam never existed, He would have to act either with a real and positive influence upon Adam or else merely negatively. But He cannot act in the first way, for the terminus of a real and positive influence must exist, and Adam either no longer exists or never did exist, so that he cannot be acted upon by God. Nor can He bring it about in the second way, for if Adam has already been produced by his causes, then God cannot bring it about that he never existed simply by withdrawing His influence—a positive act would be needed to bring this about. Hence, God is not now able to bring it about that what has been has never been.

(b) It involves no less a contradiction to be immediately in contact with something remote in time as something remote in space. But Molina purports to have shown in q.8.art.1 that action at a distance does involve a contradiction. There he argued that just as it is inconceivable how somebody could travel from one place to another remote place except by traversing the intermediate distance, so it is inconceivable for an agent limited to a certain place to be able to transmit his action to a distant place without first producing something in space that serves as go-between to transmit his action to the distant place. Molina grants that God is able to transmit a body from one place to another remote place without use of a medium by arranging simultaneously the same body in the distant place. For God, being immense, is everywhere present and can reconstitute in another place what has ceased to exist in one place. He has but to withdraw the act of being conveyed to any body in some

place and convey it to the same body in another place. On the other hand, if God wishes to transfer a body to another place by means of force, then there is no way to do this without leading it across the intervening space. This being granted, if an agent were limited to a certain place, then even in the case of God Himself, he could not transmit an action to a distant place without any intermediary. Causation at a distance is thus impossible. But the same holds true for temporal, as well as spatial, distance. Therefore, it is contradictory that God at this present time should be in contact with and overturn some temporally prior thing so as to bring it about that what existed has not existed or that what did not exist has existed.

(c) After God made Adam, He either knew that Adam existed or not. The second alternative is unacceptable, for God would then be ignorant of what He had made. But this first alternative leads to a contradiction: for after He made Adam God knew that he existed, but after He brought it about that Adam had never existed, God knew that Adam did not exist, so that in God's cognition He knows both that Adam did and did not exist, which is contradictory.

(d) If there is potentiality in the past, then the revelations and promises that God has made concerning future events are undermined, for they could be voided. But it is impossible for God to lie. Therefore, there must be no potentiality in the past. On the basis of these four arguments, Molina concludes that God does not have power over the past. But since one cannot grant God a merely partial power over the past, it follows that a retrocausal account of divine foreknowledge and future contingency is incoherent.

2. God is free to will and to know the opposite only in a prior instant of nature, but in a later instant of nature His will and knowledge are determined immutably to one alternative. Hence, in eternity insofar as it corresponds to past time, divine will and knowledge were determined to the existence of certain future contingents. But God is therefore not now able to bring it about that His will and knowledge were not so determined. Since what He wills and knows, He wills and knows eternally, it follows that at no point of time is God able to bring it about that He has not willed and known from eternity that certain events were to be.

3. If God foreknows that a certain future contingent will occur, it follows that it will in fact occur. Therefore, it will never be the case that God knows the opposite. Hence, God will never bring it about that from eternity He never knew what He now knows.

4. If God does not have the ability to bring it about that effects which have already been produced by their causes were never produced, then God's foretelling the future with certainty via prophecy would be impos-

sible, which is heretical; if prophecy is to be certain, then God must have complete power over the past, which is contradictory. If God does not have the power, for example, to bring it about that Jesus never told Peter that he would deny Jesus three times, then, since Peter is able to not deny Christ, he is able to falsify Christ's prediction, thus robbing it of all certainty. The only way to preserve the certainty of biblical prophecy is to hold that were the foretold event not to occur, God would at that point bring it about that He never in fact made the prophecy. But such power over the past is not only impossible, but also equally robs divine foreknowledge and revelation of all certainty. For what confidence can we repose in divine revelation if it is true that God can bring it about that no such revelation has been made, that whether He brings this about depends on a future contingent event which is equally able to occur or not, and that whether God will bring this about is now as uncertain and contingent as the future free choice is uncertain and contingent? On such an account, Peter and the apostles, having heard Jesus's prophecy of Peter's denial, were no more certain that such an event would occur than they would have been had this revelation never been made! Molina adds as a final consideration that such a theory seems to leave no place for divine providence or predestination, since God brings about the past on the basis of what contingent events transpire, rather than on the basis of supplying the means whereby He knew that certain contingent events would occur.

Molina thus has a very strong conception of the necessity of the past and will not allow even that God has power over certain "future-infected" pasts, such as that God foreknew some contingent event. Once a determination of the will or knowledge exists, it would be contradictory for God to bring it about that from eternity He willed and knew differently.

Molinist Solution

His rejection of the retrocausal reconciliation of divine foreknowledge and human freedom does not, however, imply that Molina embraces theological fatalism. Rather he holds that were some future contingent event, which is foreknown by God, not to occur, then God's infallible middle knowledge would have been different, and God would thus not have foreknown that the event would occur. God does not act at the time of the event to bring about His past beliefs and intentions concerning the event; rather He infallibly knows what will occur under any circumstances and thus infallibly foreknows what will in fact take place. In contrasting his view that of his opponents, Molina explains,

...God knows with absolute certainty...what is going to happen contingently in virtue of freedom of those causes, yet He knows this in such a way that (i) the opposite is able to occur, and that (ii) if it were going to occur, as it is really able to, then from eternity God would have known *this* with absolute certainty and not what He in fact knows... It follows that the contingency of things and freedom of choice with respect to the future are perfectly consistent with God's certain knowledge and will, a knowledge and will which are not only altogether unchangeable, but also fixed and stable to such a degree that it now already involves a contradiction for God to have willed the contrary from eternity or to have known from eternity that the contrary was going to occur.⁴⁶

This last claim might seem incompatible with Molina's point (i), for it would seem that if the opposite is able to occur, then God's foreknowledge is able to have been different. But Molina denies this.⁴⁷ He asserts that it does not follow from the contingency of future events that God's knowledge is able to be and always have been different. It only follows that were the future contingents not to occur, then God's knowledge would be different, since in such a case He would have known from eternity something other than what He now knows. Unfortunately, Molina then confuses the issue by concluding that given what God foreknows, He is not able to *bring it about* that He knew otherwise. But the question is not whether the retrocausal account is viable; the issue is whether, given the fact that the future event is able not to occur, God's foreknowledge, in virtue of His middle knowledge, is not also able to be different. Molina states that the future event is, in the composed sense, not able to fail to occur (that is, given divine foreknowledge, the opposite event cannot take place), but that it is, in the divided sense, able to fail to occur (that is, taken in and of itself, it is capable of not happening). Should Molina not have held in the same way that God's foreknowledge, in the composed sense (that is, given the content of His middle knowledge), is not able to be otherwise, but that it, in the divided sense (that is, taken in abstraction from middle knowledge), is able to be otherwise? Perhaps Molina would agree with this, but still insist that divine foreknowledge is nonetheless temporally necessary. But this only serves to introduce a new composition and division. Given that God has foreknown an event, His foreknowledge is, in the composed sense, incapable of being otherwise. But considered in itself apart from temporal considerations, it is, in the divided sense, able to be different. Similarly, given that an event is future, it is, in the composed sense, incapable of not occurring. But apart from temporal considerations, it is, in the divided sense, able to not occur. Hence, it is difficult to see why, if a future event is in a certain sense contingent, God's foreknowledge is not in the same sense contingent. But Molina eschewed this conclusion

because, as we have seen, he felt it undermined the certainty of God's foreknowledge.

Response to Objections

In disputation 52 Molina considers six objections which might be raised against his reconciliation of divine foreknowledge and future contingency on the basis of *scientia media*: (1) Since God's knowledge is the cause of things and God's knowledge is necessary, everything foreknown by Him happens necessarily. (2) In the true conditional "If God foreknew x will happen, then x will happen," the antecedent is absolutely necessary both because it is eternal and because there is no power over the past. Therefore, the consequent is absolutely necessary. (3) Everything known by God necessarily obtains. But since no future contingent obtains necessarily, such events cannot be known by God. (4) No event foreknown by God is capable of not occurring, for if it were not to occur, God would be mistaken. Therefore, since God cannot err, no event foreknown by God is contingent. (5) Aristotle showed that the determinate truth of future-tense propositions entails that everything happens necessarily. In the same way, if God's foreknowledge is determinately true, fatalism follows. (6) The proposition "From eternity God foreknew that Peter was going to sin tomorrow" entails the proposition "Peter is going to sin tomorrow," since God's knowledge is infallible. It is not within Peter's—or even God's—power to bring about the contradictory of the antecedent; therefore, it is not within Peter's power to bring about the contradictory of the consequent. For if it is not within one's power to bring about the contradictory of the antecedent of a necessary implication, neither is it within his power to bring about the contradictory of the consequent. Therefore, foreknowledge destroys free choice.

In response to these objections, Molina argues as follows:

1. God's free knowledge through which future contingents are known is not a cause of things. With regard to things which proceed from created free decisions, God is a remote cause through His natural and middle knowledge, since these enable Him to know precisely the circumstances in which a creature's will will determine itself to some effect. Moreover, God is a cause of such effects proximately through His will by determining to bring about a certain order of circumstances. But since His free knowledge is posterior to His will, God is not in any sense a cause of things by it.⁴⁸ Moreover, even through His middle knowledge, God is not the total cause of things, since the created will itself is part of the cause of what God knows through it.⁴⁹ Because God's knowledge thus depends on the creature's will and does not produce its effect without a determination of the divine will, it does not produce its effects necessarily.

2. In response to the second objection, Molina begins by explaining that temporal necessity is an absolute as opposed to a relative or hypothetical necessity. For it does not involve a condition which is hypothesized to be in things, but is already actually in them in such a way that its removal involves a contradiction. Thus, while there is a sort of hypothetical necessity involved in stating, "Everything is necessarily, if it is" there is an absolute necessity involved in stating, "Necessarily, Adam existed." For the fact that Adam existed can no longer be negated or prevented in any way. In the same way, God's foreknowledge is necessary, such that for anything He foreknows, "... it *now* involves a contradiction for Him not to have foreknown it, both because there is no power over the past and also because no change can befall God."⁵⁰ But Molina also reminds us that in virtue of His middle knowledge if the opposite of what He in fact foreknows were going to happen, then God would have foreknown that instead.

With these points in mind, Molina proposes to resolve the second objection by denying that if the antecedent of a necessary implication is temporally necessary then the consequent is also temporally necessary, or in other words, by denying that temporal necessity is closed under entailment. He claims that the antecedent may be necessary and yet the consequent contingent in any case in which (i) the antecedent is necessary only in the mode of temporal necessity and (ii) the knowledge expressed in the antecedent was formed in dependence on the fact that the event known was going to happen contingently; this knowledge would have been different if the event were not going to happen; and this knowledge derives its certainty, not from its object, but from the perfection of the knower. Molina's exception would thus have to involve a conditional with an antecedent expressing a logically contingent state of affairs which is counterfactually dependent upon the causally contingent state of affairs described in the consequent, where the antecedent state of affairs has already obtained in consequence of the fact that the consequent state of affairs will obtain, and the counterfactual relationship between them is broadly logically necessary. In response to the objection that it might therefore turn out that the antecedent is true while the consequent is false (since the contingent state of affairs described in the consequent might not obtain), Molina rejoins that if the opposite of the consequent were to obtain, then, in virtue of the conditions laid down, the antecedent would never have obtained beforehand. Hence, it is impossible that the antecedent be true and the consequent be false. All that results, then, from the truth of the antecedent is a *necessitas consequentiae*, not a *necessitas consequentis*. The state of affairs in the consequent is temporally contingent and may yet obtain or not obtain, but if it were not to obtain,

necessarily neither would the state of affairs in the antecedent have obtained.

In this response, we see again Molina's very strong conception of temporal necessity. With regard to God's foreknowledge, it is now absolutely impossible for Him to know or have known otherwise. Nevertheless, Molina insists that the still future state of affairs foreknown by God is entirely contingent. God cannot, however, be mistaken because His knowledge necessarily correlates counterfactually with the future state of affairs. In effect, Molina argues that it can be true both that a past state of affairs is temporally necessary and that were some future contingent state of affairs not to obtain, then that past state of affairs would not have obtained, but rather a different past state of affairs would be temporally necessary instead.

3. The third objection confuses *necessitas consequentiae* and *necessitas consequentis*. It is true that if an event is foreknown by God, necessarily that event will occur. But it does not follow from this that the occurrence of the event is necessary. Molina also takes the opportunity here to deny human foreknowledge of future contingents. He explains that with regard to human knowledge, the only certainty which we may have *vis à vis* future events is the probability of their occurring. That is to say, events which will most probably occur given present causes are the objects of more certain belief than those with a lesser probability of occurring. Presumably future events may be said to be more or less probable depending upon the number and disposition of the contingent causes necessary for their production. An event which is all but causally determined would for Molina have a greater certainty than an event which depends on a vast complex of contingent causes, some of which may be ill-disposed to play their required roles. Hence, human beings can be said to know only future events which are presently causally determined to occur. God, on the other hand, derives the certainty of His foreknowledge, not from the certainty of the events themselves, but from the depth and eminence of His intellect, namely, His infallible middle knowledge.

4. The proposition, "No event foreknown by God is capable of not occurring" is true only in the composed sense, in which case the argument fails. In the divided sense, the event is able to occur or not occur, and were it not to occur then the divine foreknowledge of it would never have existed. Therefore, the divine foreknowledge which exists is, indeed, incompatible with the event's not occurring, but it is perfectly compatible with the event's being *able* to not occur. For if that possibility were to be actualized, the divine foreknowledge would always have been different.

5. Molina identifies the failing in the fifth objection with that in the third objection, and here we encounter an important interpretative difficulty concerning Molina's view of the truth status of future contingent propositions. He writes,

For since our knowledge and cognition do not have more certitude than there is certitude in the object considered in its own right, it follows that if we were to have certain knowledge of future contingents and if propositions about those same things were determinately true, then that would be because the things in themselves were certainly and determinately going to be—something that could be the case for no other reason than that the things in themselves were necessary with a necessity of the consequent. However... God's knowledge of future contingents, which have no certitude *from themselves or from their causes*, is absolutely certain. Thus, from the fact that future contingents are known by *God* with certainty it does not follow that they are going to occur necessarily in reality—in the way that this *would* follow if *our* cognition of those things were certain or if the propositions we form about those things were determinately true.⁵¹

The position Molina wants to defend is that God's foreknowing future events does not have the fatalistic implications which Aristotle ascribed to future contingent propositions' being determinately true. His reasoning is reminiscent of Adams's Boethius, who argued that knowledge of future-tense propositions is possible only if the states of affairs described are now causally determinate. Molina agrees, as we have seen, that human knowledge of future events does imply that the events are now causally necessary. But he denies that such is the case with God's knowledge, since His knowledge of the future springs from His middle knowledge and is not based on causal inference. But what of Aristotle's argument that the sheer truth or falsity of future contingent propositions wholly apart from their being known, has fatalistic implications? Here Molina seems to place future-tense propositions' being determinately true on the same footing with our knowing them—either case is possible only if the future events are now causally necessary. Hence, he rejects, along with our knowledge of future contingents, future contingent propositions' being determinately true (or false). Such reasoning leads Freddoso to comment that Molina must mean by "determinately true" causally necessary, so that he is not denying the applicability of the Principle of Bivalence to future contingent propositions, but only the modal status of causal necessity.

The difficulty arises, however, that traditionally Molinists and Thomists alike have taken Molina to deny that future contingent propositions are bivalent. Indeed, he is said to have differentiated his own view from that of Suarez in this matter, a disagreement which Thomists have exploited by playing off Molina and Suarez against each

other.⁵² According to Dumont, Molina's earlier comments in disputation 52.14-15, which were added to the 1595 edition of the *Concordia*, were directed specifically against Suarez's defense of the Law of Excluded Middle for future contingent propositions.⁵³ In that place Molina writes,

There are those who contend that in future contingents, it is always the case that the one part is determinately true from eternity before it obtains and the other part determinately false, and that for this reason the one part is *by its nature* knowable as determinately future and the other part as determinately not future; and they maintain that since whatever is *by its nature* knowable is such that God knows it *naturally, before* any free act of His will, it follows that God knows before any free act of His will not only (i) what will come to be on any hypothesis of created free choice, but also (ii) what God himself is going to will later in nature.... For the latter is likewise determinately true before it is decided upon by God.⁵⁴

Against this position Molina asserts that the claim that future contingents are by their nature determinately true conflicts with the teaching of Aristotle and the common opinion of the Doctors of theology, as well as the very nature of contingent things, which are by their nature indifferent as to whether they obtain or not. Molina argues that his opponents' foundation for God's knowledge of future contingents thus breaks down, since it exceeds the nature of future contingents that they should be knowable by God, so that God must know them only by supercomprehension. He concludes, "...clearly it should not be claimed that God knows before the determination of His own will which part that will is going to determine itself to, but it should rather be claimed that in that prior instant the divine intellect just shows Him all the *other* things at once, including those things which would come to be because of any creatable will on any hypothesis and within any order of things...."⁵⁵

Does Molina mean to assert against Suarez that future contingent propositions are neither true nor false? What makes this question so difficult to answer is that the opinion Molina essays to refute is in no wise implied by the view that future contingent propositions are bivalent. For what Molina objects to in his opponents' view is the claim that future contingents are by their natures knowable as determinately future and the further claims that God therefore knows them naturally prior to any determination of His will. But the second claim is a wholly unjustified inference, since a Molinist may hold that future contingent propositions are bivalent posterior to the decision of God's will. Prior to the determination of God's will, certain propositions expressing hypothetical futures are true, but there are no true propositions expressing unconditional futures. Hence, future contingent propositions are not part of the natural knowledge of God; but as a part of His free knowledge, they are bivalent. What Molina objects to is holding that future contingent

propositions are bivalent prior to the decision of God's will concerning creation, for he believed that in such a case God's decision could not be free. As for the first claim, Molina wants to insist that a future contingent event is capable of occurring or not and therefore propositions about them are not determinately true or false. But again, the claim that future contingent propositions are bivalent in no way implies that the events in question are therefore not causally contingent. Molina does not here distinguish between future contingent *events* and future contingent *propositions*, which seems to foster an equivocation. To say that a future contingent proposition is by its very nature either true or false is not to say that the future contingent events it describes are by their very natures determined to occur or determined not to occur. A future contingent event—say Peter's denying Christ—is unknowable so far as the nature of the event itself is concerned; but a proposition about that event—say, "Peter will deny Christ"—is by its very nature bivalent and so must be known by God. So once more, Molina does not object to future contingent propositions being bivalent *per se*, but to justifying their bivalence by the claim that the events described are by their natures determined to occur or not to occur.

But was it Molina or his opponents who made the mistaken inference? On the one hand, the equivocation seems to emerge only in Molina's refutation, which would suggest that he himself was under the misconception that bivalence implies causal necessity. On the other hand, Molina never denies that future contingent propositions are true or false, but only that they are *determinately* true or *determinately* false. If "determinate" means "causally necessary" as Freddoso claims, then Molina's contention is that since the nature of the events concerned is causally contingent, the propositions about them cannot be causally necessarily true or causally necessarily false, which makes good sense of his argument. Moreover, even Aquinas, who also insists that future contingent propositions are not determinately true or false, held that they are true or false, and Ockham, who champions bivalence for future contingent propositions, is not beyond saying that they are not determinately true or false.⁵⁶ By the time of Molina's writing, the view that future contingent propositions lacked truth value had been officially condemned by the church, which makes Molina's assuming such a position *prima facie* unlikely.

In fact, a resolution of this interpretative difficulty would seem to be at hand in Molina's commentary on Aristotle's *De interpretatione*.⁵⁷ As his opening summary reveals, Molina understood Aristotle to be contending, not that future contingent propositions lack truth value, but that they lack *determinate* truth value, having instead an indeterminate truth value:

In this chapter Aristotle teaches, first, that in a contradiction of future contingent propositions neither part is determinately true and the other false, but rather that one part is indeterminately true and the other false; in all contradictions of present and past-tense propositions one part is determinately true and the other false, except in cases in which either part is sometimes determinately true....⁵⁸

In an *antiphrasis* of future contingent propositions one is indeterminately true and the other is indeterminately false; in this they contrast with past- and present-tense propositions, whose truth values are determinate. It would thus appear that Molina advocates the non-standard interpretation of Aristotle, according to which Aristotle denies, not the truth of the future contingent propositions, but only their necessity.

This initial impression is confirmed by the ensuing argumentation in the chapter. Molina presents two arguments purporting to show that future contingent propositions are determinately true or determinately false, and his responses to each are very illuminating with regard to the truth status of such propositions. According to the first argument, for any future contingent proposition *p*, *p* is true or false by the very definition of a proposition. But it cannot be both; therefore, it must be one or the other. Therefore, it is either determinately true or determinately false.⁵⁹ What is especially intriguing about this argument is that the first inference asserts only the truth or falsity, not the determinate truth or falsity, of any future contingent proposition, and it will be interesting to see if Molina disputes this assertion. He responds, "As for the first argument, therefore, when it is inferred in the first inference that 'therefore is signifies one or the other,' if our opponent means 'one or the other determinately,' then the inference is to be denied; but if he means 'one or the other indeterminately, but either this or that,' then the first inference is to be granted and the second denied."⁶⁰ Molina does not deny that *p* is true or false; what he denies is the inference that it must be determinately true or determinately false. He allows the first inference that *p* is either true or false so long as it is one or the other indeterminately. In that case, the second inference fails. He proceeds to explain that this inference is like the argument: an eye is required in order to see; but both eyes are not required, just one or the other. Therefore, either the left eye is determinately required or the right eye is determinately required. Molina grants that *p* is true or false, but not determinately true or determinately false.

The second argument is equally fascinating because it sheds light on exactly what Molina meant by "determinately true." The second argument accuses Aristotle of confusing *necessitas consequentiae* with *necessitas consequentis*. When Aristotle concludes, "Everything happens

necessarily," if only a *necessitas consequentiae* is at issue here, then no problem is posed for human freedom. But if Aristotle means to assert a *necessitas consequentis*, then he has failed to show this. The determinate truth of future contingent propositions imposes no greater necessity on things than does divine foreknowledge, namely, a *necessitas consequentiae*.⁶¹ What is helpful about this argument is that it explicitly introduces the notion of necessity and spots an apparently genuine modal fallacy in Aristotle's reasoning. How will Molins save the day? He responds that Aristotle does mean to prove a *necessitas consequentis*, and Molina denies, as he does in the *Concordia*, that the determinate truth of future contingent propositions imposes no greater necessity than does divine foreknowledge:

And the reason is that in order for propositions about the future to be determinately true it is necessary that they be infallibly true. For if they are not infallibly true, they will not be determinately true, but indifferent, and might yet be false. But the infallibility of true propositions about the future depends on the infallible and necessary future effect as considered in itself and not on its opposite. This is why Aristotle said in this connection that if propositions about the future are determinately true, the things will happen necessarily and therefore such propositions are never known. For things will not happen necessarily because propositions are determinately true, rather propositions are determinately true because things will happen necessarily.⁶²

Here Molina makes it clear that for a proposition to be *determinately* true it must be *infallibly* true. Moreover, in the case of future-tense propositions, their infallibility depends upon the infallibility and necessity of the future events themselves. It now seems obvious that Molina does not deny the truth of future contingent propositions but only their infallibility and causal necessity. At the same time, his remarks also serve to broaden the concept of determinate truth beyond the notion of mere causal necessity. The concept of infallibility with regard to a proposition *p* would seem to mean that *p* cannot now or can no longer have a truth value different from the one it in fact has. Hence, for Molina logically necessary truths would no doubt be determinately true. But similarly, as his opening remarks to his commentary on this chapter reveal, propositions which are temporally necessary are determinate in their truth values. Hence, it would be too restrictive to claim with Freddoso that Molina, in denying that future contingent propositions are determinately true or false means simply that they are not causally necessary; he certainly means that, but also that they are not logically or temporally or in any other sense necessary with a *necessitas consequentis*. But it seems clear that he does not deny their truth or falsity. As for God's foreknowledge, Molina agrees that it is determinately true, that is to say, infallible and

now incapable of being otherwise, but he emphasizes here, as in the *Concordia*, that since its infallibility depends, not on the infallibility and necessity of the events themselves, but on God's own acumen, it does not entail that things happen necessarily, as do infallibly true propositions.

Hence, in rejecting the view that future contingent propositions are determinately true or false, Molina is not claiming, *pace* the traditional interpretation of him on this score, that such propositions are not bivalent. Rather he maintains that such propositions are logically, causally, and temporally contingent, that they are not part of God's natural knowledge, and that they therefore neither form the foundation for God's foreknowledge nor prejudice the contingency of the future.

6. Molina wants to argue that while it is within Peter's power to refrain from sin, still it is not within his—or even God's power—to bring it about that God's foreknowledge of his sin would never have existed. Given his strong conception of temporal necessity, Molina cannot ascribe to Peter or to God such a power, since God's foreknowledge has existed from eternity and is therefore absolutely necessary. Of course, if Peter were to refrain, God would have foreknown from eternity that he would refrain. But given what God does foreknow, Peter lacks the power to bring it about that God would have never foreknown his sin. But if Peter lacks this power, and God's foreknowledge entails that Peter will sin, how then is it within Peter's power not to sin? Molina answers that one may lack the power to negate the antecedent of a necessary implication and yet have the power to negate, or not to posit, the consequent; or in other words, he holds that power is not closed under entailment. Hence, it is within Peter's power to refrain from sin, but it is not within his power to affect God's foreknowledge, even though it is necessarily true that where he to refrain from sin God would always have foreknown differently.

Molina's reconciliation of divine foreknowledge and future contingency is thus a very novel and provocative one, combining as he does the strictest notion of temporal necessity with the freedom to determine the course of future events. He concludes that contingency and freedom are perfectly compatible with divine foreknowledge and that God cannot therefore be blamed for the choices we make or the destinies we determine.

PRESCIENCE, PROVIDENCE, AND PREDESTINATION

As we noted at the outset of this chapter, one of the principal motivations behind Molina's theory of *scientia media* is the theological capital he thought stood to be gained from such a conception in reconciling divine sovereignty and human freedom, especially in light of Protestant errors.

His fourth proof of middle knowledge, it will be remembered, was that it is presupposed by the biblical doctrines of providence and predestination. Indeed, he claimed that had his doctrine been known and clearly understood during earlier ages, Pelagianism and Lutheranism would perhaps never have arisen.⁶³ It would be valuable, therefore, in closing, to look briefly at the cash value, as Molina saw it, of middle knowledge for Christian theology.

Prescience

Little more needs to be said of the value of *scientia media* for the doctrine of divine foreknowledge. If Molina is correct, then he has furnished a remarkably ingenious basis for God's knowledge of the future. By knowing naturally what every possible free creature would do in any possible situation, God can by bringing about that situation know what the creature will freely do. Of course, the situation itself may depend on the conspiracy of previous contingent causes, so that God would have to know what even earlier circumstances to bring about in order to get precisely that situation which He desires. And that situation may constitute part of the circumstances for still further free decisions which God would foreknow. These sets of circumstances combine to form world orders from which God by willing His own free actions, including the decision to create, selects one to bring into actuality. Thus, He foreknows with certainty everything which happens in the world.

Moreover, God's infallible foreknowledge is not incompatible with the contingency of future events, for were some event to occur differently than it will in fact occur, God's middle knowledge would have been different, and, hence, God would have foreknown differently than He does. Molina dares even to assert the temporal necessity of God's beliefs and volitions and to deny any power whatsoever over the past; for neither temporal necessity nor power is closed under entailment, so that a state of affairs which is necessary and outside our control may entail another state of affairs which is nonetheless contingent and within our power. While it is impossible in the composed sense, given God's foreknowledge, for anything to happen differently than it will, this sense is irrelevant to contingency and freedom. In the relevant, divided sense we are as perfectly free in our decisions and actions as if God's foreknowledge did not exist. Middle knowledge therefore supplies not only the basis for divine foreknowledge, but also the means of reconciling that foreknowledge with creaturely freedom and contingency.

Providence

The biblical worldview involves a very strong conception of divine sovereignty, even as it presupposes human freedom and responsibility.⁶⁴ Reconciling these two doctrines without compromising either has proven extraordinarily difficult. But Molina's theory of middle knowledge furnishes a startling solution to this enigma. Since God knows prior to His decision to create what any possible creature would do in any possible circumstances, God in deciding which creatures to create and which circumstances to bring about or permit ultimately controls and directs the course of world history to His desired ends, and yet without violating in any way the freedom of His creatures.

Molina defines providence as the ordering of things to their ends either directly by God Himself or mediately through secondary causes.⁶⁵ But here one must distinguish between God's absolute and conditional intentions concerning creatures. It is, for example, God's absolute intention that no creature should ever sin and that all should reach beatitude. But we have seen that it is not within God's power to determine what decisions creatures would freely take under various circumstances. In certain circumstances, creatures will freely sin, despite the fact that it is God's will that they not sin. If then God for whatever reason wants to bring about those circumstances, He has no choice but to allow the creature to sin, though that is not His absolute intention. God's absolute intentions are thus often frustrated by sinful creatures, though His conditional intention, which takes into account the creatures' free actions is always fulfilled. Now obviously in this world it is the plan of providence to permit sin to occur. But even sin serves God's conditional intentions in that it manifests His overflowing goodness in the incarnation for the purpose of rescuing man from sin, His power in His redeeming man from sin, and His justice in punishing sin.

While God's providence, then, extends to everything that happens, it does not follow that God wills positively everything that happens.⁶⁶ God wills positively every good creaturely decision, but evil decisions He does not will, He merely permits. Molina explains,

....all *good* things, whether produced by causes acting from a necessity of nature or by free causes, depend upon divine predetermination...and providence in such a way that each is *specifically intended* by God though His predetermination and providence, whereas the *evil* acts of the created will are subject as well to divine predetermination and providence to the extent that the causes from which they emanate and the general concurrence on God's part required to elicit them are granted through divine predetermination and providence—though not in order that *these particular acts* should emanate from them, but rather in order that *other, far different, acts*

might come to be, and in order that the innate freedom of the things endowed with a will might be preserved for their maximum benefit; in addition evil acts are subject to that same divine predetermination and providence to the extent that they cannot exist in particular unless God by His providence *permits them in particular* in the service of some greater good. It clearly follows from the above that all things without exception are *individually* subject to God's will and providence, which intend certain of them *as particulars* and permit the rest *as particulars*. Thus, the leaf hanging from the tree does not fall, nor does either of the two sparrows sold for a farthing fall to the ground, nor does anything else whatever happen without God's providence and will either *intending it as a particular* or *permitting it as a particular*.⁶⁷

Everything that happens, therefore, occurs either by God's will or permission, and thus falls under His providence.

This serves to bring into focus Molina's doctrine of simultaneous concurrence, which together with middle knowledge supplies the underpinnings of his doctrine of providence.⁶⁸ Since God is the first cause, Christian theology traditionally held that God not only conserves the universe in being, but that He concurs with the operation of every secondary cause in the universe so that He is quite literally the cause of everything that happens. Aquinas interpreted the notion of divine concurrence to mean that God not only supplies and conserves the power of operation in every secondary cause, but that He acts on the secondary causes to produce their actual operations, a view that came to be known as the doctrine of premotion. With regard to contingent acts of the will, this doctrine meant that the free decisions of creatures are produced by God's causing the will to turn itself this way or that. The doctrine of premotion has thus a very strong conception of divine sovereignty, but its proponents insist that human freedom is not thereby annulled, since God causes the finite will to turn itself *freely* to one or the other part of a contradiction. Molina, however, rejects the interpretation of divine concurrence in terms of premotion as in reality utterly deterministic and incompatible with the existence of sin.⁶⁹ Instead he proposes to regard divine concurrence as simultaneous concurrence; that is to say, God acts, not *on*, but *with* the secondary cause to produce its effect. "...God's general concurrence...is *not* an influence of God's *on the cause* so that the cause might act after having been previously moved and applied to its act by that influence, but is instead an influence *along with the cause directly on the effect*...."⁷⁰ He compares divine concurrence with secondary causes to two men pulling a boat: there are two causes cooperating to produce a single, total effect. Thus, when a man wills to produce some effect, God concurs with the man's decision by also acting to produce that effect; but He does not act on the man's will to move it to its decision. "...This

concurrence is not a motion of God's *on* the will by which He moves, applies, and determines the will either to precisely *that* act...or even to *an* act...; instead it is an influence *along with* the will which depends for its existence on the influence and cooperation of the will itself....⁷¹ In sinful decisions, God concurs by acting to produce the effect, but He is not to be held responsible for the sinfulness of the act, since He did not move the finite will to do it, but only out of His determination to allow human freedom, permitted the decision to be made.⁷² In either willing or permitting everything that happens, therefore, God acts to produce every event in the actual world.

In reconciling divine sovereignty and human freedom, Molina thus appeals both to middle knowledge and simultaneous concurrence. By His middle knowledge God knows an infinity of orders which He could instantiate because He knows how the creatures in them would in fact respond given the various circumstances. He then decides by the free act of His will how He would respond in these various circumstances and simultaneously wills to bring about one of these orders. He directly causes certain circumstances to come into being and others indirectly by causally determined secondary causes. Free creatures, however, He allows to act as He knew they would when placed in such circumstances, and He concurs with their decisions in producing in being the effects they desire. Some of these effects God desired unconditionally and so wills positively that they occur, but others He does not unconditionally desire, but nevertheless permits due to His overriding desire to allow creaturely freedom and knowing that even these sinful acts will fit into the overall scheme of things so that God's ultimate ends in human history will be accomplished.⁷³ God had thus providentially arranged for everything that happens by either willing or permitting it, and He causes everything that does happen, yet in such a way as to preserve freedom and contingency. For God's providential order is not necessary: given the effects produced by God in the world either directly or else indirectly via deterministic causes, things could go vastly differently were the creatures simply to choose differently, as they are free to do. But, of course, were they to so choose, God would have possessed different middle knowledge than He does and so would have chosen a different providential plan to bring about His ends. Though creatures are free, God's ends will certainly be achieved, since the infallibility of middle knowledge guarantees that God's providential plan cannot fail. Divine sovereignty and human freedom are, therefore, entirely compatible, given middle knowledge and simultaneous concurrence.

Predestination

If Molina's reconciliation of divine providence and human freedom is stunning, his reconciliation of predestination and freedom is even more ingenious. According to Molina, prior to Augustine the Church Fathers typically based predestination on divine foreknowledge: God predestined those to be saved whom He foreknew would freely place their faith in Christ. With the advent of Pelagianism, however, Augustine showed the need of God's prevenient grace if any man were to come to faith. Lost in sin, men would never on their own initiative come to Christ; hence, God must first stir their wills by His unmerited grace to move them to saving faith. Predestination thus became the arbitrary gift of God, unrelated to His foreknowledge. Hence, with regard to the doctrine of predestination, one seemingly has to hold either that predestination is based on the foreknowledge of human merits or else that predestination is wholly wrought by God without any considerations of human free decision. It is this dilemma that Molina seeks to resolve by means of the theory of middle knowledge.

On Molina's view, predestination is merely that aspect of providence which pertains to eternal salvation. Predestination is the concept of the order and the means by which God ensures that some free creature attains eternal life.⁷⁴ It has its basis in the divine middle knowledge, through which God knows that a certain creature will freely assent given certain circumstances to God's gift of grace, and in the divine will, which chooses to actualize such an order of circumstances and gifts. In the final analysis, the act of predestination is simply God's creating one of the world orders known to Him via His middle knowledge.

Molina rejects as Calvinistic and heretical the view of Bañez that God gratuitously chooses certain persons to be saved and others to be damned and then premoves each elect persons's will to produce saving faith, while leaving the non-elect in sin, so that the elect are subjects of predestination while the non-elect are subjects of reprobation.⁷⁵ On Molina's view, election does not precede predestination, but is simultaneous with it. Nor is reprobation properly conceived the counterpart to predestination. Reprobation is the divine judgement that a creature is unworthy of eternal life, but rather deserves punishment, and the divine determination to exclude that creature from heaven and to consign him to punishment. Now the counterpart to this is not predestination, but approbation, whereby God judges a creature to be worthy of eternal life and determines to receive him to glory. Approbation is thus posterior to predestination as its final product and is opposed to reprobation. But there is no act which is the counterpart or opposite of predestination.

At the same time, Molina rejects as Pelagian the view of Lessius that predestination consists in God's creating certain persons because He knew that they would freely make good use of the grace God would give them and so be saved. Rather Molina held that God's choosing to create certain persons has nothing to do with how they would respond to His grace; He simply chooses to create the world order He wants to, and no rationale for this choice is to be sought other than the divine will itself. In this sense, predestination is for Molina wholly gratuitous, the result of the divine will, and in no way based on the merits or demerits of creatures.⁷⁶

Persons in the world order which God has chosen to create who are not predestined to salvation cannot complain of injustice on God's part because God in His goodness provides sufficient grace for salvation to all men in the world, and the only reason they are not predestined is because they freely ignore or reject the divine helps that God provides. Their damnation is therefore entirely their own fault. This is so even though it is the case that had they been put in different circumstances or given other helps they would freely have responded to God's grace and been predestined to salvation. (Similarly, those who are predestined to salvation, if placed in different circumstances or given different helps, might not have responded and so been lost.) For the fact remains that God desires all men to be saved and has provided gracious helps sufficient for every person to have faith and be saved, if only he so wills. That is not to say that according to Molina it is simply up to us to be predestined or not, as Van Steenberghe reminds us,

This is not to say that predestination depends on the individual, since it consists in the choice made by God of an order of things in which He foresaw that this individual will arrive at salvation. Precisely there is the delicate point, "the unfathomable depths of God's designs": God knew an infinity of providential orders in which the non-predestined would freely arrive at eternal life and thus would have been predestined; He knew as well an infinity of providential orders in which the predestined would have freely lost beatitude and would have been reprobate; and yet He chose for the one and for the other the order of providence in which He foresaw that the one would be saved and the other not. He did this by His will alone and without consideration of their acts, but without injustice, since he has provided them all the means of arriving at eternal life.⁷⁷

On Molina's view, we might say that it is up to God whether we find ourselves in an order in which we are predestined, but that it is up to us whether we are predestined in the order in which we find ourselves.⁷⁸

This serves to bring into focus Molina's doctrine of grace. As a Catholic Counter-Reformer, Molina did not profit from Luther's insight into the nature of grace as the unmerited favor of God, but instead

thought of grace as a sort of divine assistance or power given to men to enable them to perform certain acts, which they in their corrupted natural state could not do, that lead in turn to their meriting salvation. Although man's unassisted will can produce a sort of natural faith which is not salvific, justifying faith is a supernatural act which requires God's prevenient and exciting grace to solicit and rouse the will. The action of prevenient grace is followed by a response of the human will, either assenting to or dissenting from the operation of grace. Prevenient grace is wholly unmerited, but is given gratuitously by God to all men, even to those who have no natural faith or desire for salvation. If the will assents to the action of prevenient grace, this same grace becomes cooperating grace simply in view of the will's decision to cooperate with it. God infuses into the assenting person a *habitus fidei supernaturalis*, whereby the believer from then on makes the act of faith with only God's general concurrence and so multiplies good works meriting salvation. The action of prevenient grace, which is a particular concurrence of God, differs from God's general concurrence in that His particular concurrence acts *on* the will, not *with* it, to render it capable of responding freely to God's initiative, and particular concurrence is not simultaneous, but precedes in time or nature the operation of the will. The will remains free to resist the action of prevenient grace, thus aborting the process of justification. Obviously, then, for Molina grace is not intrinsically efficacious, but only extrinsically efficacious; that is to say, the difference between sufficient grace and efficacious grace lies not in the quality or magnitude of the grace itself, but in the response of the human will to that grace.⁷⁹ Sufficient grace for salvation is accorded to all men; for those who assent to its operation this same grace is efficacious in procuring their justification. Hence, in a real sense our salvation is in our hands. God desires and has given grace sufficient that all men should be saved. If some believe and others do not, it is not because some received prevenient grace and calling while others did not. Rather the efficacy of God's grace in our lives is up to us, and every man, however unconducive his circumstances, is called and moved by God in a measure sufficient for salvation.

The reconciliation of predestination with free will is accomplished by means of God's middle knowledge. Prior to the determination of the divine will, God knows how every possible free creature would respond in all possible circumstances, including the offer of certain gracious help which God might provide. In choosing to create a certain order God commits Himself, out of His goodness, to offering various graces to all men which are sufficient for their salvation. He knows, however, that many men will in fact freely reject His aids and be lost. But those who

assent to His grace render it efficacious in procuring their salvation. Given God's immutable determination to create a certain order, those whom God knew would respond to His grace are predestined to be saved. It is absolutely certain that they will respond to and persevere in God's grace; and, indeed, in the composite sense it is impossible that they should be lost. Nevertheless, in the divided sense they are entirely free to reject God's grace; but were they to do so, then God would have had different middle knowledge than He does and so they would not be predestined.

On Molina's view, then, predestination involves God's willing that aspect of the world comprising the natural circumstances and supernatural gifts of grace which form the milieu in which a person freely responds to God's gracious initiatives and is saved. Since God chooses to create any world He wishes without respect to how any given person would respond to His grace, predestination is unmerited and gratuitous. God in His mercy has decided to grant all men grace sufficient for salvation, even those He knew would reject it, but grace becomes efficacious only for those who assent to it. A person who assents to and continues in God's grace is predestined in virtue of the temporal necessity of God's creative will and act. But he remains free not to respond; only were he not to respond, then he would not be predestined, and God would have known that that person would respond differently under the same circumstances and given the same graces than the way in which he would in fact respond. Thus, predestination and freedom are entirely compatible.⁸⁰

SUMMARY

Molina's doctrine of *scientia media* thus promises to deliver a great deal theologically. Indeed, if middle knowledge proves to be a coherent notion, it is almost breathtaking in its ability to resolve a number of the most profound theological conundrums. In fact, so great is its ability to elucidate these questions that Molina felt constrained to defend himself against those who accused him of destroying divine mysteries. He answered, "But surely, since truth agrees with truth, whereas truth will not easily harmonize with falsehood, the fact that these four things [prescience, providence, predestination, and reprobation] cohere so easily and perspicuously with freedom of choice on the basis of middle foreknowledge is a manifest sign that we have propounded a complete and legitimate way of reconciling all of them."⁸¹ Certainly it provides the most compelling reason for a studious consideration of and possible adherence to middle knowledge today.

CHAPTER EIGHT

FRANCISCO SUAREZ

Also a Spanish Jesuit of the turn of the sixteenth century, chiefly renowned for his writings in metaphysics and philosophy of law, Francisco Suarez came to the defense of the Molinist theory of divine middle knowledge and prescience in the debate surrounding the congregations “De auxiliis” being held in Rome. As a young theologian, he had discounted the notion of middle knowledge. From a student’s notes on Suarez’s lectures on grace during 1582-83 at Rome, we learn that Suarez found difficulty with the view that God knows that if He were to place a man in such-and-such circumstances, then he would freely consent to God’s grace.¹ Suarez objects that not even an infinite intelligence can discern in a set of circumstances and a free cause what that free cause would do. Here we see the roots of Suarez’s later scepticism concerning the doctrine of supercomprehension as a basis for God’s middle knowledge. The young Suarez also objects to the Molinist account of predestination on the ground that if God knows infallibly what men would do in response to God’s grace, then why does He not so order His graces as to save all men? Later Suarez was to adopt a theory of congruent grace which only served to sharpen this question. But if the early Suarez rejected middle knowledge as a means of reconciling divine sovereignty and human freedom, he also objected even more strenuously to the Bañezian theory of divine predetermination and premotion, for such a view was incompatible with human culpability for sin.² Basically, then, the young Suarez was simply left without an answer to the problem.

By 1590, however, he had become persuaded of the inescapable truth of the doctrine of divine middle knowledge.³ The reasons for his change of mind were theological rather than philosophical. Despite the difficulties of middle knowledge, such a doctrine is firmly grounded in the Scriptures and Church Fathers and provides the only alternative explanation to predetermination as the basis for the infallibility of divine predestination and providence.⁴ When in 1594 Clement VIII called for the tribunal “De auxiliis” and invited treatises from the opposing parties to inform him of the issues involved, Suarez found opportunity for full expression of his views in two *opuscula* (1594-97), the second of which in particular treats *De scientia Dei futurorum contingentium*. Unfortunately, this treatise has, to my knowledge, never been translated, even into Spanish,

and although the secondary literature on Suarez is much more extensive than that on Molina, his contribution to the discussion of divine foreknowledge is rarely discussed at any length.⁵ It is this *opusculum* which will form the basis of our inquiry into Suarez's views, though we shall have occasion to refer to the second prolegomenon to his later, massive *De gratia*, treating of God's knowledge of conditional futures, and we shall be particularly interested in highlighting the respects in which Suarez's doctrine diverges from that of Molina.

The *opusculum* devoted to God's knowledge of future contingents is divided into two halves: the first deals with God's knowledge of absolutely future contingents, that is, divine foreknowledge of events which are in fact future, and the second deals with God's knowledge of conditionally future events, that is, divine middle knowledge of events which would be future were some condition be assumed to obtain.

GOD'S KNOWLEDGE OF ACTUALLY FUTURE CONTINGENTS

The burden of the first half is to account for the means by which God has foreknowledge of future contingents and then to show that such knowledge does not impose necessity on future events. Suarez held that the source of contingency in the world is the created or uncreated will.⁶ For while there is contingency in nature in the sense that a natural cause is determined to its effect can be impeded by other natural causes, still if one knew the whole of nature he would know both the causes and the impediments as necessary. But contingency which derives from the power of the cause to act indifferently given its causal antecedents could not be so known. According to Mullaney in his lengthy study of Suarez's teaching on human freedom, the human will is free in that (1) it is an active faculty which, of itself, without divine premotion has the power both to act and to suspend action and (2) while acting, it is proximately so disposed that given everything necessary for its act, it can act or not-act.⁷ The first half of Suarez's treatise will therefore turn on the question of how God has foreknowledge of the free acts of created will and their effects; that being solved, the question of theological fatalism can then be addressed.

The Basis of God's Foreknowledge of Future Contingents

Suarez defends what might be called an "innatist" view of the basis of divine foreknowledge of future contingents. That is to say, given that God is omniscient, He knows all truth; future contingent propositions are either true or false; therefore, God knows future contingent

propositions—no further explanation is necessary. Since in the second half of this work, Suarez defends divine middle knowledge, one might anticipate that he would appeal to it as the basis of God's foreknowledge. But, although he held that middle knowledge together with God's decree does enable God to know the actual future, still in the first half of this work he seems anxious to let foreknowledge stand on its own without appeal to middle knowledge as its grounds. God simply intuitively knows all truth and so knows the truth of future contingent propositions.

Defense of the Truth of Future Contingent Propositions

The crucial step in Suarez's argument, therefore, is his contention that future contingent propositions have bivalent truth value, or as he usually puts it, are determinately true. By "determinate" truth Suarez means no more than simply "truth"; he states clearly that "...a proposition which is not determinately true is not true, for it is still, as it were, suspended between and indifferent to truth and falsity...."⁸ Later he explicitly rejects the interpretation of Aristotle according to which Aristotle meant only to deny that future contingent propositions are "necessarily true" or "evidently true."⁹ Suarez rightly points out that Aristotle does not even use the word "determinately"—he simply states that such propositions are neither true nor false. If such propositions were neither true nor false, they would be unknowable, even to God, for there would be no truth there to be known. The question whether God knows future contingent propositions, then, hinges on whether such propositions are true or false.

Suarez is fond of comparing God's omniscience in this regard to His omnipotence.¹⁰ God's knowledge, like His power, is infinite. When we ask whether something is within God's power, we investigate not God's power, but the thing itself, to see whether it is capable of being done. In the same way, in order to discover whether future contingents are known by God, we must investigate not God's knowledge but future contingent propositions themselves, to see whether they are knowable. But that which is true in itself is intrinsically knowable, as truth is the object of knowledge, so that if such propositions are true, they cannot escape the infinite and perfect knowledge of God. If they, on the other hand, are not true, then it is no imperfection in the divine knowledge not to know them, just as it is no imperfection in the divine power to be incapable of doing what is impossible.

Taking his stand against both Aristotle and Cicero, Suarez maintains that future contingent propositions are known to God.¹¹ He furnishes both proofs from Scripture and proofs from reason for this conclusion.

With regard to the latter, he argues that (1) God's governing the world through His providence would scarcely be possible without divine foreknowledge. Suarez's point here would seem to be that God performs certain actions in the present on the basis of what He knows will in fact take place in the future. Without such knowledge, He would not take such actions and thus might find Himself in a situation in which His only means of controlling the course of future events would be to violate human freedom. This argument can be made even more strongly on behalf of middle knowledge, as we shall see. (2) Divine immutability requires foreknowledge. If God lacked foreknowledge, then He would be constantly learning new things, as the course of events unfolds. But such an increase in knowledge implies prior imperfection in God and cannot therefore be countenanced.¹² (3) Since future contingent propositions are true or false, they are knowable and, hence, must be known to God. Suarez states, "...these future contingents, which are signified on our part by future-tense propositions, have before they come to be in time and, indeed, from eternity determinate truth; accordingly, they are knowable and are foreknown to God."¹³

This third argument bears the principal weight in Suarez's case for divine foreknowledge of future contingents. Accordingly, he supplies both theological and philosophical reasons for holding to the bivalent truth value of future contingent propositions.¹⁴ Theologically, Suarez appeals to biblical prophecy of contingent events. When God says, for example, that "Peter will sin," this proposition is simply and actually true; therefore, it is determinately true. God foreknows future events because that is how the events will occur; but if they will so occur, then propositions about them are determinately true or false. Philosophically, Suarez appeals to the Principle of Bivalence and to the Law of Excluded Middle as a basis for holding to the determinate truth of future contingent propositions. He states that if no future contingent proposition is determinately true, then they must all be determinately false (Principle of Bivalence). But it is impossible that all future contingent propositions be false, for (1) God would then know them all as false, which clearly He does not, (2) Aristotle denied the determinate falsity of such propositions as well as their determinate truth, and (3) it is impossible that contradictory future contingent propositions both be determinately false (Law of Excluded Middle). If "Peter will sin" is determinately false, then "Peter will not sin" must be determinately true. Even Aristotle acknowledged that "Peter will or will not sin" is true. But for the truth of a disjunction it is necessary that one of the disjuncts be true. Therefore, one part is determinately true, though, Suarez hastens to add, which one it is is probably not discernable by us. In such a

disjunction, the only confusion that exists is in our cognition, since we do not know determinately which disjunct is true. But our lack of certainty is no reflection of any uncertainty in the respective truth values of the disjuncts themselves.

In addition to these considerations, Suarez attempts to explain how it is that a true future contingent proposition corresponds with reality. Suarez clearly embraces an A-theory of time according to which becoming is objective rather than mind-dependent and future events in no sense exist. In explaining what it means for a thing to be future, he states, "...to be future formally consists in a certain transition from the being which a thing has in its cause to the being it will have in itself at some future time."¹⁵ The being which a thing has in its cause "is the sole foundation of its being future."¹⁶ Hence, events which do not yet exist do not yet coexist with the divine eternity.¹⁷ As things pass from potential into actual being, they successively come to exist in the divine eternity. Furthermore, Suarez also holds to a view of truth as correspondence. A proposition must, as he puts it, be conformed to its object in order to be true. The question thus arises, how can a proposition concerning a not-yet-existent event be conformed to its object? Suarez responds that the truth of a future-tense proposition depends not on what does exist, but on what will exist, on that transition *ab esse in potentia ad esse in actu*. "For if it is conformed to that, it is true; if not, it is false, whatever being something might have had in its cause."¹⁸ He notes that if it is now true that "Peter sins," then prior to the present moment the future-tense version "Peter will sin" was determinately true.¹⁹ This must be so, for (1) the future-tense version obviously does not begin to be true at the moment when Peter sins; indeed, it is then false; and (2) the future-tense proposition has always been conformed with its object, since Peter's sin was truly going to be. Hence, the future-tense proposition does not newly become true when Peter sins; rather that moment we begin merely to discern its antecedent truth. Prior to the present moment it was the case that Peter was going to sin or not. For a future event is in itself determinately future; it has the property (*habitus*) of being a future event.²⁰ This does not mean it is causally determinate, for if it is contingent it can fail to be produced by its causes. But though it is causally contingent, still it is a determinately future event. Hence, when one asserts "Peter will sin," this proposition is either conformed to its object or not. If so, then the future-tense proposition is determinately true; if not, then it is determinately false. Thus, in order for a future contingent proposition to correspond with reality, the reality described need not (indeed, cannot) now exist. Suarez concludes, "...even if [one extreme of a contradictory pair of future contingent propositions] is in no way present according to

actual existence, it is enough that, necessarily, one part or other will later have determinately that actual presense, since such a proposition does not speak of a present thing, but of a future thing and must therefore have conformity with it as such.’’²¹

God's Knowledge of True Future Contingent Propositions

How, then, does God know the truth of future contingent propositions? Observing that it is easier to say how He does *not* know future contingents than how He does, Suarez rejects the accounts of his predecessors, including appeals to the divine ideas, the timeless divine vision, and the divine decree.²² Rather God knows future contingents by a simple intuition of the truth. He writes, ‘‘...God knows these future things merely through a simple intuition of the truth or of the thing which will be at its proper time, as it will be at that time and according to all the conditions of existence which it will have at that time.’’²³ We may not understand this mode of knowledge, but that inability in itself furnishes no grounds for positing some other explanation. Suarez proposes three arguments to show that this mode of knowledge is possible: (1) no contradiction is involved in supposing God to have such a mode of knowledge; (2) past and present things can be known by a simple intuition because they are determined, but future contingent propositions are equally determined to one alternative, that is, the Law of Excluded Middle holds for such propositions; and (3) a knowable thing can be known if cognitive power is not lacking in the knowing subject, but future contingent propositions are *ex parte objecti* knowable since they are true or false, and God lacks no cognitive power. For these reasons, such a simple intuition of the truth of future contingent propositions is not impossible.

In answer to the question as to the principle of such knowledge, Suarez answers that on the part of the knower the principle is simply God's essence, which serves as the basis for the divine cognition. Since for Suarez the formal truth of propositions is identical with their truth in the divine intellect, true propositions are immediately evident to the divine mind or essence—there are no abstract objects outside the divine mind which serve as truth bearers.²⁴ As far as the non-intentional object of knowledge, that is, the future contingent itself, is concerned, such an event can be the terminus of God's knowledge, but not the principle of His knowledge. For while its existence would be required to be the principle of divine knowledge, its existence is not necessary for it to be the terminus of divine knowledge, as is clear from the cases of past events and mere *possibilia*, which also have no existence, but are known to God.

In order to be the terminus of divine foreknowledge, all that is required is that the event occur when its time arrives. "On the part of things, in order to be able to be absolutely known from eternity, it is necessary that at some time they co-exist with eternity although that co-existence is not eternal.... Still in order for an object to be able to be the terminus of eternal knowledge, it is necessary that it at least sometime exist."²⁵ To have a thing present to His eternity is for God to know or intuit from eternity a thing at its future time.

Suarez thus attempts to provide an account of the basis of divine foreknowledge which does not make explicit appeal to middle knowledge. Nevertheless, as he closes his discussion, he observes that while knowledge of causes is not sufficient for knowledge of future contingents, still such foreknowledge is not without knowledge of causes, and Suarez takes that to mean knowledge of the decisions of the divine and human wills, which produce contingent effects. But the only way to foreknow the emanation of the effects from such causes is via a knowledge of the divine decree, that is, via middle knowledge, which he shall discuss in book two of the *opusculum*.

Compatibility of Divine Foreknowledge and Future Contingency

Having explained the basis of divine foreknowledge, Suarez now turns to a discussion of why such foreknowledge does not impose necessity on the events foreknown. He considers three arguments for theological fatalism borrowed from Aquinas: (1) From a necessary cause the effect necessarily follows. But God's knowledge is a necessary cause because God causes things by His knowledge and in Him there is no contingency. (2) If God knows that something will be, it necessarily follows that that thing will be. But the antecedent of this conditional is necessary because God's knowledge is in the past. Therefore, the consequent is also necessary. (3) Everything known by God necessarily is. Therefore, everything happens necessarily.²⁶

Response to First and Third Arguments

Suarez has little difficulty in disposing of the first and third arguments. In response to the first, he points out that God's *scientia visionis* of future events is not a cause of things and neither is it necessary.²⁷ God's *scientia visionis* is a purely speculative knowledge which does not cause its object and cannot therefore impose any necessity upon it.²⁸ Suarez rejects the sentence "*Quia Deus praescit hoc esse futurum, ideo futurum est.*" This denial does not mean that temporal events cause God's knowledge; when one

asserts the true sentence “*Quia hoc futurum est, ideo Deus illud praescit*,” one is claiming a logical, not causal, priority of future events to God’s knowledge of them. God’s knowledge is the cause of things in that the divine ideas are the exemplary causes of things and His *scientia approbationis* determines which things shall exist. In any case, God’s foreknowledge of future contingents is not simply necessary, for He could fail to have it with respect to some object, since that object could fail to be future, in which case God would not foreknow it. *Ex suppositione* God’s knowledge is necessary in that: (1) if the future event be presupposed, then God cannot lack eternal foreknowledge of it; (2) if this knowledge is posited in God, it will remain immutably in Him; (3) if God has such knowledge, it is certain and infallible, since God cannot err. None of these senses of necessity is, however, incompatible with contingency or freedom. Suarez observes that his solution leaves unanswered the two questions of how it can be that effects would still be contingent even if God acted by a necessity of nature and how God accommodates Himself to secondary agents so as to have regard to their free decisions—but these are allusions to his doctrine of middle knowledge, to be discussed in the sequel.

As for the third argument, the proposition “Everything known by God necessarily is” is false in the divided sense (*de necessitate rei*), but true in the composite sense (*de necessitate dicti*). That is to say, it is necessary that “Everything known by God is,” but it is not necessary that “This thing, which is foreknown by God, is.”

Response to Second Argument

Rejection of Proposed Solutions

The second argument, however, merits a more lengthy discussion.²⁹ Suarez begins by rejecting three proposed solutions of the difficulty. (1) According to the first solution, the proposition, “If God knows Peter will sin, then Peter sins” is neither necessary nor true. For while the antecedent is now true, the consequent is not yet true, but false. But Suarez dismisses this solution as frivolous. For whatever God knows is true. In this case, one must simply specify the appropriate times in the antecedent and consequent in order to obtain a true conditional.

(2) According to the second solution, the proposition, “God knew that Peter would sin” is necessary neither simply nor by supposition, nor in the divided sense nor in the composite sense. On this view, although God knows that Peter will sin, still He can not have known this and can bring it about that He never knew this. Indeed, Peter can bring this about

himself by choosing not to sin, as is in his power to do. In such a case, Peter brings it about that there never was foreknowledge of his sin in God. But Suarez maintains that the second solution cannot be sustained in this sense. For (i) there is no potency in the past, so that a past-tense proposition is necessary at times subsequent to the time at which the event described occurs; and (ii) such a view is incompatible with divine immutability. For in the sense explained above, this solution allows that God, after having known p from eternity past, can act so as to bring it about that He has never known p from eternity past. It might be rejoined that God's knowledge is not strictly past, but present. Suarez's doctrine of divine eternity will not, however, permit such a response. For (a) while it is true that God's knowledge is not past in the sense that it no longer exists, still it is past in the sense of being coextensive with past eternity (that is to say, it is now true that such knowledge coexists with eternity); and (b) the present truth of "God knows p " suffices to procure the necessity of immutability, since such a proposition is necessary *ex suppositione* and *in sensu composito*. Like Molina, Suarez believes that this second solution so understood undermines the certainty of divine revelation, since God could bring it about that He had not said what He in fact said.

(3) According to the third solution, the necessity of the antecedent is not carried over to the consequent, or in other words, temporal necessity is not closed under entailment. This solution we have seen to have been preferred by Molina. Suarez, however, finds difficulty with this solution. He begins by noting that a proposition like "God knew that Peter would sin" is not simply necessary. For (i) only propositions are simply necessary which have their necessity by the intrinsic connection of the terms, which this proposition does not; (ii) God could lack such knowledge, for the future event could fail to occur and were it to do so, God would not have possessed such knowledge from eternity; (iii) being true and past-tense is not sufficient for simple necessity; for example, "Adam was" is not simply true, but only on the supposition that "Adam is" was true at some time in the past, a supposition which, however, is not necessary. Now since the truth of a proposition like "God knows p ," where p is a future-tense proposition, depends on the truth of p , it follows that unless p is simply necessary, the proposition in question is not simply necessary. This account might sound Ockhamistic, except that Suarez proceeds to distinguish between simple necessity and absolute necessity. A proposition is simply necessary if truth is inseparably attached to it without any supposition. Suarez identifies this necessity with what he calls intrinsic necessity, which a proposition possesses if it is true in virtue of its terms alone (that is, in an analytic proposition). Past-tense propositions which lack this intrinsic connection of their terms are not necessary

simpliciter, for they could be false unless one presupposes the past truth of the appropriate present-tense versions. On the other hand, absolute necessity is the necessity which characterizes a true past-tense proposition. It is interesting that Suarez at this point refers the reader to Anselm's account in his *Concordia* of the difference in this regard between past-, present-, and future-tense propositions, an account which is not without its difficulties.³⁰ According to Suarez, true, logically contingent, present-tense propositions can later be false, since what they describe can cease to be. Similarly, once the events predicted by future-tense propositions transpire, such propositions can become false. So even if these have been always true, they are not absolutely necessary. But true past-tense propositions retain their truth inseparably; hence, the maxim "*Ad praeteritum non est potentia*." Since things in the past are already determined to one alternative and have proceeded from their causes, no cause has it within its power to make them not to have been. Thus, necessarily, what is now true in the past will always be true in the past. From this account, absolute necessity would appear to be a necessity of immutability: if a logically contingent proposition is unalterably true, then that proposition is said to be absolutely necessary.

Suarez's Solution

Now Suarez contends that the necessity operative in the second argument is this absolute necessity, which attaches to the proposition, "God knew that Peter would sin." The objection is that since this proposition is absolutely necessary, the proposition, "Peter will sin" is absolutely necessary. Accordingly, Suarez's solution to the second argument is a sort of hybrid of (2) and (3) above. On the one hand, the absolute necessity of God's foreknowledge is not incompatible with the truth that Peter has the power so to act that were he to act in that way God would have foreknown differently than He does. Neither God nor Peter can effect a *change* in the divine foreknowledge, but they can so act such that divine foreknowledge would have been different. This is because Peter's action is a condition which is logically prior to the divine foreknowledge. Moreover, while the necessity of the antecedent is carried over to the consequent in the sense that it is certain that Peter will sin, nevertheless the consequent cannot be said to be absolutely necessary, since, as we have seen, future-tense propositions like this one become false once the predicted event occurs, so that truth is not inseparably retained by them. In this sense, absolute necessity is not closed under entailment. The necessity, then, attaching to a proposition, "This event which is foreknown by God will occur" is merely *in sensu composito*. In the divided

sense, the event itself is not necessary and can fail to occur, and were it to do so, God would not have foreknown it. Suarez writes,

I therefore concede on the basis of the preceding that there follows a certain necessity in the consequent, not, however, a simple or absolute necessity, but a necessity *on the assumption that...*, which does not exclude contingency. This is best said to be necessity in that composite sense, which does not exclude contingency or freedom of act or result, for in truth here it is not said to be a necessity of composition merely because of the supposition of divine knowledge, but rather because that divine knowledge itself presupposes the futurity or actual truth of the future thing.... Therefore, as is commonly said, on the supposition that God knows a thing to be future, it is impossible for it not to be future in the composite sense; therefore, it is true without the exclusion of freedom or contingency, for in that supposition of knowledge the supposition of its object, that is to say, its future truth, is inherently or mediately included. Therefore, that supposition is not merely extrinsic nor is it at all independent of the free power of the proximate cause, but rather it presupposes its future determination in such a way that if it were not future, it would not have been known by God.³¹

On Suarez's understanding, since God's knowledge presupposes some future event which is logically prior to His foreknowledge, God's knowledge is *a posteriori* and, hence, even if necessary, does not support a *necessitas consequentis* concerning the thing foreknown, but only a *necessitas consequentiae*.

According to Suarez, then, past things are absolutely necessary because their potency has been reduced to actuality. Therefore, it lies within no one's power to bring it about that the past effect did not exist. But with regard to future effects, the causes are still in potentiality to their production and so these causes have absolute power and freedom not to bring about their effects. Therefore, even though it is absolutely necessary that God knew Peter would sin, still Peter remains perfectly free to sin or not sin.³² The fact that God's foreknowledge of his sin entails his sin does not remove this contingency. For God knows he will sin because he will sin; it is not the case that Peter will sin because God knows he will sin. Hence, were he to refrain, God would have known other than as He does know and no change would have occurred in the past. Peter's sin will most definitely occur, but this involves only a necessity in the composite sense, not the divided sense.³³

This solution provides the basis for the certainty of God's knowledge. All that is required on the part of the object is determinate truth and necessity in the composite sense. If this truth is known clearly, it is infallible and certain. All that is required on the part of the knower is sufficient power to know all truth, which God certainly has. Suarez concludes,

It is to be maintained that for the certainty of knowledge all that is required on the part of the material object or the thing known is determinate truth and necessity of composition, which necessarily accompanies it. For a proposition which is at some time true for that time which is presupposed to be real is necessarily true—necessary, to be sure, in the composite sense, for it is not able to be simultaneously true and false. Neither can anything else than this truth be desired on the part of that object, for if such truth, as it is in itself, should be attained by an evident and clear light, it cannot result in a false judgement because it is infallible and certain. On the part, therefore, of the knower, such light is required for certainty and infallibility, as well as a power of knowing, in order to attain truth always; neither would it be possible for there to be a discrepancy with this objective out of its intrinsic nature. But such light is in God, and thence arises in His knowledge (as a knowledge of whatever exists) that very sort of necessity which we declared in the solution to the first argument.³⁴

Suarez thus takes a more moderate view of the past's necessity than Molina, contending that in a case like that of divine foreknowledge where some future contingent event is a logically prior condition of some past event or state of affairs, the free agent involved in the production of that event has it within his power to produce or not to produce that event and thus the power, not indeed to change the past event, since there is no longer any potential for that, but to act in such a way that were he so to act, the past event would have been different. From the fact that the past event is actual, the future event will most certainly and infallibly occur and is in that sense necessary. But such a necessity concerns only the composite impossibility of the past event's occurring without the future event, a necessity that imposes no necessity on the future event itself, which is in fact the condition rather than the consequence of the earlier event.

Summary

In summary, there are good grounds for affirming divine foreknowledge of future contingents, since God as an infinite and perfect knower must know all truth and future contingent propositions are in fact either true or false. He knows true future contingent propositions by a simple intuition of the truth through His own essence. Although His knowledge is past and therefore absolutely necessary, that is, immutable, such necessity is not closed under entailment and, His knowledge, being based on the future events themselves, is capable of being otherwise should the future contingents not occur as God knows they shall.

GOD'S KNOWLEDGE OF CONDITIONALLY FUTURE CONTINGENTS

Suarez's analysis of God's knowledge of *futura conditionata* follows closely the pattern of his analysis of God's knowledge of *futura absoluta*. He first

seeks to establish that God does in fact possess middle knowledge and, secondly, to explain the basis of God's knowledge of conditional futures.

Defense of Divine Middle Knowledge

Biblical, Traditional, and Theological Arguments

In first establishing that there is such knowledge in God, Suarez discusses at length the traditional Scripture passages and marshals an impressive array of citations from the Church Fathers to show that "middle knowledge" is but a name for an old and established doctrine.³⁵ Suarez shows, for example, that Augustine sought to explain the death of an infant on the grounds that God knew that were he to become an adult, he would fall away from the faith and be lost; or again, God did not allow the gospel to reach certain persons because He knew that even if it had, they would not have believed. Suarez also argues theologically for the utility of such knowledge in explaining divine providence and predestination.³⁶ Middle knowledge is of the highest necessity for divine providence, for it would be impossible for God to plan for and govern the world according to His wisdom without such knowledge. For example, on the basis of mere foreknowledge alone, it is impossible to answer the question, why did God create man, knowing that he would sin? If God lacks middle knowledge, one must say that He determined man's fall Himself, which is contrary to the divine goodness. So long as man is free and not pre-determined by God, middle knowledge becomes indispensable to divine providence. Moreover, the efficacy of divine calling and prevenient grace in infallibly producing their result depends on God's middle knowledge. For there are only two alternatives available for explaining the efficacy of God's calling and grace: either God predetermines and pre-moves the will to assent to His grace or else God knows which graces would be perfectly suited to elicit from any person a free and affirmative response. But since the first destroys freedom, the second must be affirmed. God knows prior to His decree to create the world under which circumstances a man would freely embrace the gospel and can thus decree such prevenient graces so as to infallibly ensure the man's assent.

Philosophical Arguments

Philosophically, Suarez argues that God must have knowledge of *futura conditionata* because the conditional propositions concerning such events are bivalent.³⁷ To the extent that such propositions are true, they are

knowable; for all truth is as such knowable, since truth as truth is the proper object of the intellect and of knowledge. Since God is all-knowing, He must therefore know such conditional propositions. Suarez again compares God's omniscience to His omnipotence: just as His power extends to all things possible, so God's knowledge extends to all things knowable. The whole dispute therefore devolves down to the question of whether such conditional propositions have determinate truth and falsity.

Defense of the Truth of Counterfactual Conditionals

Suarez first considers two opinions which deny the truth of counterfactual conditionals.³⁸ (1) According to the first point of view, such propositions are both false and impossible; therefore, they cannot be known. For what is not cannot be known (*quod non est, non scitur*). But in these conditional propositions nothing is affirmed, except that the consequent follows from the antecedent. The truth of a conditional consists, therefore, in the inference of the consequent from the antecedent. If the inference is not good the conditional is false. But once an inference is good, it is always good; therefore, a true conditional is necessarily true. But the inference made in these counterfactual conditionals is not good, and, hence, these propositions are not necessary. Thus, they cannot be true. (2) According to the second point of view, counterfactual conditionals are neither true nor false. Rather they are reducible to other truths of a quasi-modal status, for example, "If this is, then that will commonly/frequently/probably/rarely happen." For an effect which proceeds from a free cause is not at all determinate, but the truth of a locution depends on the determinateness of its object, in being conformed to it. But in the case of counterfactual conditionals, the effect is indifferent in its cause and indeterminate in itself, since it has no existence whatsoever, neither in time nor in eternity. Herein lies the crucial difference between conditional and absolute futures; propositions concerning events which will exist can be conformed to their objects, since the events will in fact take place. But these counterfactual conditionals concern events which are utterly without being and therefore cannot be true or false.

In opposition to these two views, Suarez maintains that counterfactual conditionals are neither impossible nor non-bivalent, but are either true or false, even though it is often not possible for us to know their truth value. These conditionals are true not because the consequent follows from the antecedent, but both are simply affirmed together in a conditional relationship (*sed per modum simplicis affirmationis unius de alio sub tali conditione concepto*). Thus, when we say, "If Peter were alive today, he

would do such-and-such," we do not mean to affirm that Peter will do this necessarily or that his action necessarily follows from his existence at this time. Rather we only mean to say that such an effect would in fact be conjoined with that cause were it to exist. Two considerations can be adduced in support of this contention: (1) In ordinary language such is the intent in all such locutions. We do not mean to assert that the opposite is necessarily false, but that to the best of our knowledge the conditional is in fact true. In many cases, we may have to suspend judgment on such propositions, but our reluctance to assent shows only that our knowledge is uncertain, not that such conditionals are false or lacking a bivalent truth value. (2) The things themselves and, therefore, propositions about them are not merely probable, but determinately one way or the other, though we may not know with confidence which way things are. Given certain circumstances, Peter either would or would not sin under those circumstances. When we say that it is probable that he would sin, the probability concerns not the thing itself or the proposition about it, but is an intrinsic probability with regard to the manifestation or cogitation of the proposition. The probability is in the human judgment, and such probability in fact presupposes the determinate truth or falsity of the proposition itself. The case is similar with past- and present-tense propositions, which are true or false, though we can judge them only with probability.

Hence, in response to the first opinion, Suarez rejoins that counterfactual conditionals are not false or impossible. Such conditionals do not assert a necessary inference from the antecedent to the consequent, since they are not true simply in virtue of their terms. Rather they merely affirm that if *this* is posited, then *that* follows. Hence, propositions of the form "If this is posited, then that will happen" are not impossible. In response to the allegation that affirmative propositions having a subject which does not supposit must be false, Suarez argues: (1) negative propositions, for example, "If Peter were under certain circumstances called by God, he would not convert," concern a non-existent event, but are nevertheless true or false. Therefore, propositions do not require the supposition of their subject in order to be true. (2) If propositions concern events which do not in fact occur in time, then it is not necessary that the subject have a supposit which either has, does, or will exist, but only that its supposit be the essential or possible being which the subject has. In counterfactual conditionals, neither the antecedent nor the consequent is at any time posited in being, but all that is required for the truth of such a conditional is if the one were posited, then so would be the other.³⁹ Suarez writes,

I answer that actual existence which is going to be at some time in the future is the basis of the truth of absolute assertions about the future, and in the same way keeping this analogy, actual existence which *ex hypothesi* would be future is the foundation of the truth of a conditional assertion. And therefore truth in either case can be known in the manner of the present, since God does not acquire knowledge from things such that His knowledge would be dependent upon the actual existence of the object.⁴⁰

In response to the second opinion, Suarez explains that counterfactual conditionals are, indeed, determinate in themselves insofar as they conform or fail to conform in the thing they signify.⁴¹ That is to say, they are determinately true if and only if what they assert would be the case were the stipulated circumstances to exist; otherwise they are false. Such propositions can be put into contradictory pairs, in which one part must be true and the other false. Therein, asserts Suarez, lies the foundation for their determinate truth or falsity—not in the determinateness of the things themselves, for these do not exist, but in the logical necessity that in a pair of contradictory propositions one must be true and the other false. This case is parallel to that of future contingent propositions, he remarks, for they, too, concern things which are in themselves indeterminate, but they are nonetheless bivalent. With respect to future contingent propositions, if God foresees Peter sinning under certain circumstances, then the conditional proposition is true: “If Peter is created in such circumstances, he will sin.” Even prior to God’s creating Peter, this proposition is true. The moment the antecedent is posited in being, the consequent determinately follows (or not, if the proposition is false). Thus, before the antecedent is posited, the consequent is determinately true (or false) under the condition hypothesized. By the same token, with respect to counterfactual propositions, even though the condition is never posited in being, truth or falsity belongs to the conditional as a whole. “Prior” to God’s willing the antecedent to obtain, the counterfactual conditional is determined to truth or falsity. Since in every disjunction of contradictory propositions, one disjunct is true, the following conditional is simply true: “If Peter were offered the opportunity under such-and-such circumstances, he would or would not sin.” It is futile to object that because we do not know which disjunct is true or false, neither is true or false, or that the situation described must exist in order for the conditional to be true or false.

Indeed, Suarez insists that the things and events described in counterfactual conditionals do have a sort of existence, namely, conceptual existence in God’s mind. The hypothesis or antecedent exists in God’s intellect as a supposition, and He knows what is then present in His mind as a consequence. In this way, *futura conditionata* become like *futura*

absoluta. By positing the antecedent in His mind, God reduces, so to speak, contingent causes from first act (in which they are indeterminate) to the moment of second act (in which they are actually operating), and He sees what happens as a result:

...but the cause being in this way hypothetically posited and apprehended as if it were future, it would consequently pass over into second act, which would not be able to exist in reality except as certain and determinate. Therefore, a future-tense proposition indicating a relation toward said effect will be true in reality, and the infinite and immutable divine intuition relates to it and attains it.⁴²

Thus, it is no more difficult for God to know conditional future contingents than actual future contingents.

Suarez's view of counterfactual conditionals would thus appear to be that they must be either true or false because in a contradictory pair of such propositions, the truth of the entire disjunction requires the truth of one of its disjuncts. Which disjunct is true is determined in accordance with a view of truth as correspondence, namely, which proposition accurately indicates what would be the case were the state of affairs stipulated in the antecedent to obtain. The states of affairs need not actually obtain in order for such propositions to be true; all that is required is that the states of affairs in the consequent would obtain if the antecedent state of affairs were to obtain. One could say that the antecedent state of affairs does obtain conceptually in God's mind as a hypothesis, and He then knows whether the consequent state of affairs also obtains or not. God does not thereby posit or contemplate non-actual existents, but considers the essence of possible existents. Accordingly, He knows what states of affairs would actually obtain were He to actualize certain other antecedent states of affairs.

Six Difficulties Resolved

Suarez believes that he has therewith resolved the greatest difficulties posed in opposition to middle knowledge, but he will also consider six lesser objections as well:⁴³

1. How can God know Peter's will in certain circumstances? For there is no more reason that he should will one thing or another. Therefore, neither one nor the other can be known.
2. If God knows counterfactual conditionals, then He knows the truth or falsity of any such conditional we can imagine. But then He would know the truth or falsity of counterfactuals in which the antecedent and consequent are wholly unrelated. But how could such unconnected things be known?

3. God would, on this account, have knowledge of created things independently of the divine will. If God knows, for example, that Peter would sin under certain circumstances, then although God can will to place Peter in such circumstances or not, He cannot bring it about that in such circumstances Peter not sin.
4. Middle knowledge cannot serve to explain divine providence concerning works of grace or created freedom. For such knowledge is supposed to precede the determination of the divine will. But this cannot be the case, for the counterfactual conditionals are not necessary, but contingent or free, and therefore presuppose a free determination of the will not only in creatures, but especially in God. How can it be true prior to the determination of His will that God would freely do something? And if it is true, then God cannot use such knowledge in disposing His will toward creatures.
5. If God does have middle knowledge of His will prior to its determination, then His will cannot oppose His knowledge, which is repugnant to divine liberty. All possible futures would be determined in the knowledge of God rather than in His will. Therefore, He is not free to do other than as He knows He would do under certain circumstances.
6. Middle knowledge fails as an explanation of efficacious grace, permission, predestination, and reprobation. If God knew that certain persons would not make use of His prevenient help, then He is not able to will efficaciously to save them or convert them. Thus, God is not able to elect persons or to call them efficaciously. And if predestination is not based on merit, then it becomes capricious and cruel. Finally, if God knows that certain persons, when placed in certain circumstances, would sin, then in willing to place them in such circumstances God in effect wills their sin.

In response to the first objection, Suarez explains that *ex parte Deo* there is no reason why Peter, for example, will sin, rather than not; but *ex parte objecti*, the answer is that free will determines itself under such circumstances to one alternative rather than the other. Therefore, freedom and the use of it is the reason *ex parte objecti* for why certain events would take place under certain circumstances. Suarez admits that we cannot know which alternative would be the case, "...but it is known to God *per se* by His infinite light, by which He, intuiting all possible complexes and compositions of things, at the same time intuitus which things are or would be future, and which not."⁴⁴

As for the second objection, Suarez maintains a strong stance on the validity of the Law of Excluded Middle for counterfactual conditionals. If the things themselves which are envisaged in the antecedent and consequent are directly opposed (*disparatum*), then the counterfactual proposition is false. But if the conditional posits a mere concomitance or coex-

istence of the two things, then the proposition can be true. Such a counterfactual would be similar to the future contingent proposition, "On a certain day when Peter will sin, John will do penance." Here no connection is claimed to exist between the two events; all that is meant is that they will coexist. A counterfactual proposition about two unrelated events similarly posits their coincidence without suggesting that the one follows from the other. Though we could never hope to ascertain the truth of a counterfactual positing two utterly unrelated states of affairs, God in His infinite knowledge must know such true conditionals.

In answering the third objection, Suarez concedes that counterfactuals concerning free decisions are independent of God's will as regards their truth value. But he regards it as a perfection of God to know the truth of such conditionals. The objection that this infringes on God's power could be made with equal force against His foreknowledge of the actual future, for if He knows Peter will sin in the upcoming circumstances, there is nothing He can do to prevent it short of altering the circumstances or curbing Peter's freedom. The point that needs to be remembered is that the total situation depends on God's will as to whether it shall actually exist or not.

The fourth and fifth objections Suarez lumps together, and His response to them brings to light one of the most significant respects in which his doctrine differs from that of Molina. According to Suarez, there is no reason why God in that logically prior moment to the determination of the divine will could not know, not only what every created will would freely choose under any set of circumstances, but also what His own will would choose. He knows what His own will would choose absolutely if such a free determination presupposes only that which is settled intrinsically and necessarily by God, that is, what He would choose on the basis of His natural knowledge alone. He knows what His own will would choose *sub conditione* or hypothetically if His so willing presupposes that something else be freely willed by creatures. He knows in that logically prior moment, for example, absolutely that He would will to create the world and conditionally that He would send Christ to redeem men who had freely fallen into sin.

The fact that such propositions are true logically prior to the determination of the divine will in no way removes God's liberty.⁴⁵ For God knows future contingent propositions about His own future decisions and actions without thereby removing His liberty. Just as God can know at a temporally prior moment what He will freely do, so He can know at a logically prior moment what He would freely do. Suarez provides two considerations in support of this judgement: (1) middle knowledge of God's own free acts presupposes that the truth of the relevant counterfac-

tuals depends on the free exercise of God's will. God did not will something because He knew that He would will it, but He was able to know it because He would will it. What He knows in that logically prior moment depends on the way God would in fact freely act and would be otherwise if God were to act otherwise. (2) Middle knowledge of His own acts neither presents an object to the will nor moves the will in any way, but, like *scientia visionis*, is almost purely speculative knowledge. Therefore, it does not affect in any way the operation of the divine will and, consequently, can in no sense abridge God's freedom.

Suarez, then, insists that God does have middle knowledge of His own free actions as well as of those of His creatures. Such a view is in accord with Suarez's argument for middle knowledge based on the validity of Excluded Middle for counterfactual conditionals, since it would be arbitrary to make an exception of counterfactuals concerning divine decisions and actions. Suarez's position on God's middle knowledge of His own deeds also puts him at loggerheads with Molina concerning the latter's doctrine of supercomprehension, as we shall see more fully below, since it was on the basis of that doctrine that Molina denied middle knowledge of God's free decisions.

The sixth objection also serves to bring to light some further interesting differences between Suarez and Molina concerning the application of middle knowledge to problems of grace and predestination. According to Thomists like Bañez and Alvarez, God predestines persons to heaven or hell logically prior to any prevision of human merits. God gives or withholds the efficacious grace without which the accomplishment of acts leading to salvation is impossible. God wills to permit the fall of man into sin and the damnation of the reprobate in order to manifest His justice. At the other extreme stands a theologian like Vasquez, who held that predestination and reprobation are based on prevision of merits and demerits. Grace is not intrinsically efficacious, but becomes so when man cooperates with it. Between these two views, Molina and Suarez take their respective positions. Molina stands closer to Vasquez's end of the spectrum, Suarez to Bañez's.

Distinguishing between election (appointment to beatitude) and predestination (decree not only of eternal salvation but also the means to arrive at it), Suarez emphasizes more strongly than Molina the wholly gratuitous character of God's election.⁴⁶ According to Suarez, God gratuitously chooses some individuals to be saved. Then, on the basis of His middle knowledge, He discovers what graces would be efficacious in winning the free consent of that individual to God's offer of salvation. Such graces are called by Suarez congruent grace (*gratia congrua*). Congruent grace consists of the divine gifts and aids which will be

efficacious in eliciting the response desired by God, but without coercion. No grace is intrinsically efficacious; but congruent grace is always in fact efficacious because it is so perfectly suited to the creature's temperament, circumstances, desires, and so forth, as to win his free and affirmative response. Such suitability is not the whole story, however; otherwise those who are not accorded such grace would not have a truly sufficient grace. Rather, Suarez explains,

The efficacy of this call consists in this, that God, in His infinite wisdom foreseeing what each cause or will shall do in every event and occasion, if placed in it, also knows when and to which vocation each will shall give assent if [the call] is given. Therefore, when He wills to convert a man He wills also to call him at that time and in that way in which He knows he will consent, and such a vocation is called efficacious because although of itself it does not have an infallible effect, yet inasmuch as it is subject to such divine knowledge it shall infallibly have it.⁴⁷

The efficacy of the grace is not to be found in the call itself, but in its coming from a God who possesses infallible middle knowledge. God gives congruent grace to the elect and thus predestines them to salvation. Because the grace is congruent, there is no chance that they will fall away; nevertheless, they are perfectly free to do so. As for the non-elect, the grace given to them is sufficient for salvation, but they freely reject it because it is somehow incongruent for them. Grace is thus extrinsically efficacious; otherwise one would be forced to say that God does not give sufficient grace to all men. But in that case, He, in commanding them to have faith, would be demanding the impossible and then condemning them for failing to do it.⁴⁸ Théodore de Regnon contrasts the views of Molina and Suarez:

According to Molina, God first gives to Peter a grace *capable* of obtaining a virtuous act. He then foresees that Peter will either consent or resist. Consequently He knows whether the grace will be efficacious or sufficient grace. Their difference derives wholly from human acceptance or rejection....

According to Suarez, God first decides by an *absolute predefinition* that a certain act of virtue will be done by Peter. God then *chooses*, from the treasury of His gifts, a grace which His middle knowledge has shown Him will be accepted by Peter. Consequently He gives this grace precisely because He foresees it to be efficacious. It is *congruent* grace....⁴⁹

It might be asked whether there is in Suarez's opinion a congruent grace for every person whom God could create or whether some individuals are so incorrigible that regardless of the graces accorded them by God, they would always reject God's salvation. Suarez seems to affirm that God can win the free response of any possible creature to His grace; but in response to the objection that it is logically possible that someone should

resist every grace, Suarez concedes that this is true, but adds that God could still achieve such a man's salvation by overpowering his will.⁵⁰ If it is the case that God has the power to provide congruent grace to every man, then the inevitable question is, why did He not do so? Here the young Suarez's objection to middle knowledge turns upon him with vengeance, for his theory of congruent grace serves only to sharpen this objection. It is simply a mystery why God chose this order of things rather than another.

It is an interesting historical note that Congruism soon supplanted Molina's own views among the theologians of the Society of Jesus, being proclaimed on December 14, 1613, to be the official doctrine of Jesuits by Aquaviva, then the head of the order. Congruists typically distinguished between a *predestination to glory* and a *predestination to grace*. The former is the gratuitous decree of God by which God selects an individual to share in eternal salvation. It is gratuitous because it is prior to any prevision of human merits, actual or conditional. This decree is infallible because God operates infallibly to bring about what He decrees. The latter is the decree of God to grant the elect a series of congruent graces to win their free response to God's offer of salvation. It is infallible because it is based on God's middle knowledge of what a person would do when offered certain of God's helps. Regnon provides this convenient synopsis of the positions of Thomism, Congruism, and Molinism:⁵¹

<i>Thomism</i>	<i>Congruism</i>	<i>Molinism</i>
1. God decides absolutely and gratuitously to predestine <i>S</i> to glory.	1. God decides absolutely and gratuitously to predestine <i>S</i> to glory.	1. God decides absolutely and gratuitously to give sufficient grace to every person He creates.
2. God then decides to give <i>S</i> a series of intrinsically efficacious graces to cause his free assent to God's offer of salvation. Those not included in (1) are reprobate.	2. On the basis of His middle knowledge, God chooses those graces to which He knows <i>S</i> would freely respond, if he were given them. These graces are therefore efficacious for <i>S</i> . Those not included in (1) are reprobate.	2. On the basis of His middle knowledge, God knows whether <i>S</i> would respond if given sufficient grace. If so, then in creating <i>S</i> , God predestines <i>S</i> to glory, and His grace becomes efficacious. If not, then <i>S</i> is not predestined, and God's grace remains merely sufficient.

Hence, in response to the sixth objection, Suarez emphasizes that God's declaration of an efficacious end for a man presupposes God's declaration of the means of arriving at that end. God does not simply elect men to glory, but also to reward for meritorious works, and this requires

middle knowledge of the graces, calling, and helps that will elicit freely those meritorious acts. He writes,

All this is established on the basis of the general reasoning above, that an efficacious intention of the end presupposes a foreknowledge of the means with respect to the things which are possible and efficacious on the part of the one who has the intention. Hence, it does not turn out that election and predestination are because of merits, if that 'because' means a moving cause. But it only follows that merits are the necessary means for the carrying out of His intention, without foreknowledge of which... no one would be able to intend wisely.⁵²

By means of His middle knowledge, then, God can decree graces which will be efficacious because they are so congruent for the persons accorded them. While it is true that God wills the circumstances in which some men will sin and be damned, it does not follow that He wills their sin or damnation. On the contrary, *they* will it and reject God's sufficient graces to prevent it, thus rendering them inefficacious.

Suarez has thus tried to show that God possesses middle knowledge, adducing arguments from the Bible, tradition, philosophy, and theology. In addition he has rebutted both philosophical and theological objections to such a doctrine. Therefore, it ought to be taken as proved that God does possess middle knowledge.

The Basis of God's Middle Knowledge

But that leads on to the second question that needs to be addressed concerning God's knowledge of conditional futures, namely, what is the means by which God possesses such knowledge?⁵³ The difficulty here is that every object is known either immediately through itself or else through some other medium. But counterfactuals of freedom cannot be known in themselves by their terms, since they lack any intrinsic connection and are contingent truths. Nor could they be known through some medium, since this would imply imperfection in God's cognition, for God's cognition cannot be the effect of something else. Moreover, whereas actual future contingents at least exist at some time where they can be eternally intuited by God, these conditional future contingents do not have even that slim a hold on existence. So how can they be known?

Rejection of Proposed Solutions

Suarez rejects the opinion that conditional future events can be known by inference from God's knowledge of the set of circumstances and the will placed in them, for the will is indeterminate in its causes, and so its decision cannot be inferred with certainty.⁵⁴ Nor is the Thomistic view

acceptable that God decrees which counterfactuals of freedom are true after His decree to create the actual world, for among other things this would make God the author of sin and remove human freedom.⁵⁵ Molina's view that God knows such counterfactuals by supercomprehension of the creaturely will is no more successful than these two opinions.⁵⁶ Here again we see one of Suarez's key points of difference with Molina.

According to the doctrine of supercomprehension, God's infinite intellect supercomprehends finite wills and so knows their free decisions, but only comprehends His infinite essence and does not know the free decisions of the divine will. Suarez retorts that such a doctrine falsely assumes that conditional futures are known through comprehending the will. But this is impossible, for if conditional futures can be known through a comprehension of a free cause, then even an angel could know free human decisions.⁵⁷ It is of no avail to say that an angel lacks supercomprehension, for if his comprehension discloses everything there is in the object and as much as is knowable in the object, then it will discern as much about the free decisions of that will as can be known through knowledge of that object. Supercomprehension would amount to knowledge of what is not there to be known and thus of the unknowable. Moreover, there is no justification for distinguishing between the decision of the created will and the uncreated will. For either the created will is so disposed as to be knowable with regard to what it will do or would do, or else it is not so knowable. For if the will is not so disposed as to be knowable, then no amount of supercomprehension would suffice to render it known. But if it is knowable in the power of the object, then the uncreated will is to the same extent knowable. God has perfect knowledge of His will as well as creaturely wills and so by that comprehension should know His own free decisions.

Suarez argues that God's middle knowledge of His own decisions may be proved on the basis of those decrees which God has not in fact made and on the basis of those decrees which He has in fact made.⁵⁸ With respect to the first, if God had decreed to create a race of humans stemming from a man other than Adam, He would have elected some of them. The following counterfactual is therefore true: "If God had created a race from such a man, these or those of his progeny would be elect." God can know this proposition without supercomprehension because it concerns created wills. But it entails a decision of the divine will to do the electing, and, therefore, God must have middle knowledge of what He would do also if such a race of persons were to exist. As for the second point concerning God's actual decrees, Suarez argues: (1) God must have knowledge of His free decrees which presuppose only the divine perfections, like the decree to create the world. Such a decree

cannot be known conditionally, since every condition required for it is posited in reality, the conditions being only the divine attributes themselves. Therefore, the decision to create the world presupposes no free condition. In that logically prior moment to His decision to create, God knew, "If my will is of such a nature, goodness, freedom, and so forth, then it will will to create the world," and He absolutely says, "I will to create the world," since the condition is necessarily posited and known. If, *per impossibile*, that decree were not eternal, but would be made at some moment of time, then God would still always have known that His will would make such a decree. So even though His will is eternal, it is still knowable under the future mode; that is to say, logically prior to the eternal decision to create the world God knew unconditionally that He would freely create the world. (2) God knows His own will to the extent that He can freely will this or that, not merely to the extent that He actually wills this or that. Therefore, He can know His will as it will, not merely as it does, will. God could, for example, create an angelic will from eternity which would have an eternal free determination. God would know this act of will not only as present, but also as it will emanate from such a will. But if a thing in a future time can be thus known, why not also an eternal thing? Suarez's point here must be that the logically prior moment to God's eternal decree is analogous to a chronologically prior moment to an action in time and that if foreknowledge is coherent, so is middle knowledge. (3) God in the logically prior moment to His decree has conditional knowledge of everything that would happen to creatures. At that same moment He could have knowledge of what the divine decree would be. For there is no more connection between the divine will and its act than between the created will and its act. God must then have conditional knowledge not only of finite wills, but also of what He would will *sub conditione* prior to the divine decree. In Suarez's opinion, therefore, "...no sufficient reason can be given to differentiate between the divine and the created will such that these futures could be known in the one but not in the other."⁵⁹

Suarez's Solution

But if the theory of supercomprehension fails, how then does God have middle knowledge of both His own and finite wills? Suarez's solution is parallel to his answer to the similar question concerning future contingent propositions: God simply knows all truth; counterfactuals concerning free decisions of the will are determinately true; therefore, God knows them. "It is therefore to be maintained that God knows these conditional futures by His own infinite power of understanding by

penetrating immediately to the truth which is in them or can be conceived, nor is He in need of any other means in order to know them."⁶⁰ Since the principle of God's knowledge is His essence, the objects of His knowledge need not exist in order to be the principle. Nor need they exist as the terminus of His knowledge, since truth can be known as such without medium. "But on the part of the object or the thing known, neither is it necessary that any other medium intervene, since truth itself is seen in itself and without any other medium by God...."⁶¹ Really, muses Suarez, there is no greater difficulty in God's knowledge of conditional futures than in His knowledge of actual futures:

It is, by the way, therefore certain (because much confirms this position) that there is scarcely any greater difficulty in the knowledge of conditional, as opposed to absolute, contingents. For in either case the truth about a thing is known, although in its causes it is seen to be indeterminate and in reality does not yet exist. But it is known through conformity and comparison with the thing itself as it will exist in such a time and way, whether absolutely or conditionally. Therefore, divine knowledge extends to all these truths by power of His infinite comprehension. Nor does it matter that a thing absolutely future will someday have real existence, which is not true of a thing posited conditionally, for that real existence is not truly prior to the production of the thing in its own duration and measure, but merely has truth through being ordered to a proposition about the future, and the eternal, divine intuition by reason of its immensity terminates on it as if it already truly existed. Hence, in the present, although the thing may not actually exist nor will absolutely ever exist, a conditional proposition has truth through the relation and conformity to that thing understood under the category of existence with the aforementioned condition; and the divine intuition, by reason of its infinity, will be able to extend to seeing what would be joined with that thing or what would emerge from it if it were so constituted. There is, therefore, in all these futures the same mode of cognition.⁶²

Summary

In summary, biblical, traditional, theological, and philosophical considerations combine to establish that God does possess middle knowledge, not only of finite wills' free decisions, but also of the free decisions of the divine will. The primary philosophical consideration is the validity of the Law of Excluded Middle and Principle of Bivalence for counterfactual conditionals. The truth of such conditionals does not require the existence of the objects described, but only that such things would exist if the appropriate conditions were to exist. Considerations pertinent to divine providence and predestination require that God possess His knowledge of true counterfactuals logically prior to His

decree to actualize some world. As for the means of such middle knowledge, God does not derive His knowledge from any predetermination or comprehension of the will, but rather possesses innately an immediate intuition of all truth simply in virtue of His being God.

NOTES TO CHAPTER ONE

1. See Léon Baudry, ed., *La querelle des futurs contingents*, Etudes de philosophie médiévale 38 (Paris: Librairie philosophique J. Vrin, 1950). Boethius seems to have held with the Greek commentators on Aristotle that future contingent singular propositions are neither true nor false—though his position is somewhat ambiguous in that he writes “definitely” true or false—, but nevertheless held that God does know contingent states of affairs which are future to us. The Jewish theologian Gersonides denied not only the truth-value of such propositions but also God’s knowledge of future contingent states of affairs, claiming that such a denial did not impugn God’s omniscience, since He still knows all the truth there is.
By contrast, Peter Aureoli, who first gave precise expression to a three-valued logic to deal with future contingent singular propositions, maintained that God does know future contingent states of affairs, but that this fact does not entail that the future-tense propositions correlated with them are true or false. Of the scholastics, Bonaventure, Aureoli, Ockham, Antonius d’Ailly believed that Aristotle held future contingent singular propositions to be neither true nor false, but only Aureoli, Antonius Andreas, and the Scotus of the *Opus secundum* joined him in this opinion. By far most Christian thinkers adhered both to the Principle of Bivalence *vis à vis* future contingent singular propositions and to God’s knowledge of contingent states of affairs which are future for us. (See also Philotheus Boehner, “Problems Connected with the Tractatus,” in *The “tractatus de praedestinatione et de praescientia dei et de futuris contingentibus” of William Ockham*, ed. P. Boehner, Franciscan Institute Publications 2 [St. Bonaventura, N.Y.: Franciscan Institute, 1945], pp. 87-8.)
2. For bibliography on Diodorus’s “Master Argument,” see Richard M. Gale, ed., *The Philosophy of Time* (New Jersey: Humanities Press, 1968), pp. 509-10. For a brief discussion of non-Aristotelian fatalism, see Richard Sorabi; *Necessity, Cause and Blame* (Ithaca, N.Y.: Cornell University Press, 1980), chap. 6. For an annotated bibliography through 1972 on *De interpretatione* 9, see Vincenza Celluprica, *Il capitolo 9 del “De interpretatione” di Aristotle* (Bologna: Societa’ Editrice il Mulino, 1977), pp. 79-181.
3. Anne Dickason, “Aristotle, the Sea Fight, and the Cloud,” *Journal of the History of Philosophy* 14 (1976):19. In the end she prefers the standard modern interpretation. For Williams’s comment, see D.C. Williams, “Professor Linsky on Aristotle,” *Philosophical Review* 63 (1954): 253; cf. idem, “The Sea Fight Tomorrow,” in *Structure, Meaning, and Method*, ed. Paul Henle, Horace M. Kallen, and Susanne K. Langer, with a Foreword by Felix Frankfurter (New York: Liberal Arts Press, 1951), p. 289, where he refers to Aristotle’s discussion as “more than usually condensed and garbled, but not altogether inscrutable.”
4. Lynne Spellman, “DI 9: an Exegetical Stalemate,” *Apeiron* 14 (1980): 115-24. She nonetheless defends the nonstandard interpretation.
5. Dorothea Frede, *Aristoteles und die “Seeschlacht”*, Hypomnemata 27 (Göttingen: Vandenhoeck & Ruprecht, 1970), p. 6.
6. W. V. O. Quine, “On a so-called Paradox,” *Mind* 62 (1953):65. The reference is to Aristotle’s purported contention that “It is true that *p* or *q*” is an insufficient condition for “It is true that *p* or it is true that *q*.”
7. Aristotle *De interpretatione* 9. All translations of this work unless otherwise noted will be from Aristotle, *Aristotle’s “Categories” and “De Interpretatione”*, trans. with Notes by J. L. Ackrill, Clarendon Aristotle Series (Oxford: Clarendon Press, 1963). For the Greek text see L. Minio-Paluello, *Aristotelis Categoriae et liber de interpretatione*, Scriptorum Classicorum Bibliotheca Oxoniensis (London: Oxford University Press, 1949).

8. See W. D. Ross, *Aristotle*, 5th ed. (London: Methuen, 1953), p. 31; Jan Łukasiewicz, *Aristotle's Syllogistic from the Standpoint of Modern Formal Logic*, 2d ed. (Oxford: Clarendon Press, 1954), pp. 134-5; J. L. Ackrill, ed., *Aristotle's "Categories" and "De Interpretatione"*, Clarendon Aristotle Series (Oxford: Clarendon Press, 1963), pp. 149, 151-3; Sarah Waterlow, *Passage and Possibility: A Study of Aristotle's Modal Concepts* (Oxford: Clarendon Press, 1982), pp. 16-48.
9. Colin Strang, "Aristotle and the Sea Battle," *Mind* 69 (1960): 447-8; Ackrill, *Aristotle's "De Interpretatione"*, p. 132.
10. Aristotle *De interpretatione* 9.18b31.
11. Ibid. 9.19a8-10, 19a18-19.
12. Jaakko Hintikka, "The Once and Future Sea Fight: Aristotle's Discussion of Future Contingents in *De interpretatione* 9," *Philosophical Review* 73 (1964):468. McKim follows Hintikka in this, claiming that this understanding of the structure supplies an important interpretive key to the passage. (Vaughn R. McKim, "Fatalism and the Future: Aristotle's Way Out," *Review of Metaphysics* 25 [1971-2]:85.)
13. Nicholas Rescher, "Truth and Necessity in Temporal Perspective," in Gale, *Philosophy of Time*, pp. 188-90. In the same way, Strang asserts that not until 19a7 does Aristotle begin to speak on his own behalf. (Strang, "Sea Battle," p. 457.)
14. Some proponents of the non-standard interpretation agree that in II.A.4 Aristotle is voicing his own opinion. (G. E. M. Anscombe, "Aristotle and the Sea Battle," *Mind* 65 [1956]:4; Hintikka, "Sea Fight," p. 468.)
15. Ackrill, *Aristotle's "De Interpretatione"*, p. 132; cf. p. 135. What Ackrill does not see, and where Hintikka is correct, I think, is that the dialectic requires 19a7-22 to belong to section II, not III.
16. Hintikka, "Sea Fight," p. 468.
17. In using the word "proposition," I do not mean to imply any sort of ontological commitments on Aristotle's part. This term merely serves to preserve continuity with contemporary discussions of fatalism. Aristotle himself seems to have regarded tensed sentences as the truth bearers (see Hintikka, "Sea Fight," pp. 464-5, William Kneale and Martha Kneale, *The Development of Logic*, [Oxford: Clarendon Press, 1978], pp. 45-6). Similarly when I use the expression "states of affairs" this should not be taken as a commitment to abstract objects. I mean merely reality as some proposition describes it.
18. Aristotle *De interpretatione* 9.18a 28-29.
19. See Jan Łukasiewicz, "Philosophical Remarks on Many-Valued Systems of Propositional Logic," in *Polish Logic 1920-1939*, with an Introduction by Tadeusz Kotarbiński, ed. Storrs McCall (Oxford: Clarendon Press, 1967), pp. 52, 64-5; Kneale and Kneale, *Development of Logic*, p. 47; Ackrill, *Aristotle's "De Interpretatione"*, pp. 133-4; Susan Haack, *Deviant Logic: Some philosophical issues* (Cambridge: Cambridge University Press, 1974), pp. 65-71, 77-84.
20. Ackrill, *Aristotle's "De Interpretatione"*, pp. 133-4.
21. Aristotle *De interpretatione* 9.18a30.
22. Ibid. 7.17b26-30.

"ὅσαι μὲν οὖν ἀντιφάσεις τῶν καθόλου εἰσὶ καθόλου, ἀνάγκη τὴν ἑτέραν ἀληθῆ εἶναι ἢ ψευδῆ, καὶ ὅσαι ἐπὶ τῶν καθ' ἕκαστα, οἷον ἔστι Σωκράτης λευκός—οὐκ ἔστι Σωκράτης λευκός. ὅσαι δ' ἐπὶ τῶν καθόλου μὴ καθόλου, οὐκ αἰεὶ ἢ μὲν ἀληθὴς ἢ δὲ ψευδής."
23. Kneale and Kneale, *Development of Logic*, p. 47. Cf. Aristotle *De interpretatione* 6.17a34.
24. The possibility, intimated in Spellman, "Exegetical Stalemate," p. 121, that Aristotle is not here contrasting past/present *particular* propositions with future *particular* propositions, need not give us serious pause. For the contrast is not between the subdivisions of propositions, but between the major divisions. Moreover, this would suggest that Aristotle affirmed Bivalence for future singular propositions, while denying Excluded Middle, so that such propositions have the same status as indefinite propositions. But this would not only utterly confuse the argument, but is also explicitly rejected by Aristotle when he argues that in an

- antiphrasis* of future singular propositions both cannot be true. Thus, such propositions are not on a par with indefinites.
25. Strang sees one formulation as an abbreviation of another and remarks, "...there is nothing to suggest that Aristotle intended any distinction of meaning between any two of these sentences." (Strang, "Sea Battle," p. 448.) Cf. Waterlow, *Passage and Possibility*, p. 97.
 26. Ackrill, *Aristotle's "De Interpretatione,"* p. 134. By contrast, Waterlow's view that Aristotle objects to one side of the *antiphrasis* being true and the other false requires an interpretation of chap. 9 which is fantastic.
 27. Frede remarks,

"It is entirely clear and is explicitly emphasized as well by Aristotle that for singular statements in the future the same exceptions cannot hold as for indefinite statements. If the Principle of Bivalence holds for future propositions, then so does the Law of Excluded Middle.... so it is also not surprising when Aristotle exchanges means of expression within the chapter.... When Aristotle uses as his point of departure in the first section the Principle of Bivalence and not the Law of Excluded Middle and excepts future contingents only from the first principle, this is probably only to show that the issue with regard to the problem of future contingent statements does not concern the distribution of the truth values in the *antiphrasis*, but fundamentally brings into question whether these statements can have truth values." (Frede, *Aristoteles und die "Seeschlacht"*, pp. 10-11.)
 28. Although he never defines truth and falsity *per se*, Aristotle does say this: "to say of what is that it is not or of what is not that it is, is false, while to say of what is that it is or of what is not that it is not, is true" (τὸ μὲν γὰρ λέγειν τὸ ὄν μὴ εἶναι ἢ τὸ μὴ ὄν εἶναι ψεῦδος, τὸ δὲ τὸ ὄν εἶναι καὶ τὸ μὴ ὄν μὴ εἶναι ἀληθές) (*Metaphysica* Γ.7.1011b26-7 [Ross ed. trans.]) These definitions express a view of truth as correspondence, whereby for any proposition *p*, *p* is true iff *p* corresponds with reality and *p* is false iff *p* fails to correspond with reality. But why, we might ask, is it false to say of what is not that it is (as well as that it is not)? The answer would seem to be that contradictory propositions cannot both correspond to reality, and this because reality is itself non-contradictory in nature. Thus, for Aristotle the Law of Contradiction is fundamentally a law of being: "...the same attribute cannot at the same time belong and not belong to the same subject and in the same respect..." (τὸ γὰρ αὐτὸ ἅμα ὑπάρχειν τε καὶ μὴ ὑπάρχειν ἀδύνατον τῷ αὐτῷ καὶ κατὰ τὸ αὐτό) (Ibid. Γ.3.1005b19-20.) On this basis, he can therefore conclude that "...the most indisputable of all beliefs is that contradictory statements are not all at the same time true...." (οὐν βεβαιωτάτη δόξα πασῶν τὸ μὴ εἶναι ἀληθεῖς ἅμα τὰς ἀντικειμένους φάσεις) (Ibid. Γ.6.1011b14-15.) Because the Law of Contradiction holds of reality, both propositions of an *antiphrasis* cannot correspond to reality; hence, assuming the Principle of Bivalence, the Law of Excluded Middle follows: "...so that he who says of anything that it is, or that it is not, will say either what is true or what is false..." (ὥστε καὶ ὁ λέγων εἶναι ἢ μὴ ἀληθεύσει ἢ ψεύσεται) (Ibid. Γ.7.1011b28.) This would seem to undermine Waterlow's contention that for Aristotle "false" conveys a prelogical notion.
 29. Kneale and Kneale, *Development of Logic*, pp. 46-7. Kneale states that it is important to distinguish the two principles because, she thinks, Aristotle wants to deny Bivalence while retaining Excluded Middle. It seems to me, however, that her own account cited here is closer to Aristotle's actual position.
 30. Anscombe, "Sea Battle," pp. 1, 7; cf. Strang, "Sea Battle," p. 447, 448-9, 460-1. Rescher charges that the "systematic ambiguity" of Aristotle has been eliminated by the Oxford (Ross) translation in favor of the standard modern interpretation: "*The context is invariably such that what appears prima facie as an argument against the truth (or falsity) of future contingents can equally well—or better—be construed as directed against their NECESSARY truth (or NECESSARY falsity).*" (Nicholas Rescher, *Studies in the History of Arabic Logic* [Pittsburgh: University of Pittsburgh Press, 1963], p. 50.)
 31. Anscombe, "Sea Battle," p. 1.

32. Ibid., pp. 2,7. Rescher, too, considers this sentence “very powerful evidence” that Aristotle is not rejecting Bivalence or Excluded Middle for future contingents. (Rescher, “Truth and Necessity,” p. 190.)
33. Strang, “Sea Battle,” pp. 460-1.
34. Rescher, *Arabic Logic*, p. 44.
35. Anscombe, “Sea Battle,” p. 12.
36. Aristotle *Ethica Nicomachea* 6.2.1139b6-10. (Ross ed. trans.)
 “(Ὁὐκ ἔστι δὲ προαιρετὸν οὐθὲν γεγονὸς, οἷον οὐθεὶς προαιρεῖται Ἰλιον πεπορθῆναι· οὐδὲ γὰρ βουλευέται περὶ τοῦ γεγονότος ἀλλὰ περὶ τοῦ γεγονότος ἀλλὰ περὶ τοῦ ἐσομένου καὶ ἐνδεχομένου, τὸ δὲ γεγονὸς οὐκ ἐνδέχεται μὴ γενέσθαι· διὸ ὁρθῶς Ἀγάθων μόνου γὰρ αὐτοῦ καὶ θεὸς στερίσκειται, ἀγέννητα ποιεῖν ἄσπ’ ἂν ἢ πεπραγμένα.)”
 Cf. Aristotle *De caelo* 1.12.283b12-14.
37. Aristotle *Ars Rhetorica* (Freese trans.) 3.17.1418a3-5.
 “ἡ μὲν γὰρ περὶ τὸ μέλλον, ὥστ’ ἐκ τῶν γενομένων ἀνάγκη παραδείγματα λέγειν, ἡ δὲ περὶ ὄντων ἢ μὴ ὄντων, οὐ μᾶλλον ἀπόδειξις ἐστὶ καὶ ἀνάγκη· ἔχει γὰρ τὸ γεγονὸς ἀνάγκην.”
38. Anscombe, “Sea Battle,” p. 14. Cf. Aristotle *De generatione et corruptione* 2.11.
39. Strang, “Sea Battle,” p. 459. Similarly, Ronald J. Butler contends that for Aristotle there is a difference between the irrevocable necessity of what has already happened and the causal necessity of what is predetermined. He wished to segregate future contingent propositions because they are neutral, not in the sense of truth value, but in the sense of not being already predetermined. (Ronald J. Butler, “Aristotle’s Sea Fight and Three-Valued Logic,” *Philosophical Review* 64 [1955]:268, 270.)
40. Ackrill, *Aristotle’s “De Interpretatione,”* p.139. Ackrill’s *caveat* is, however, that since many future events are not determined, the propositions about them are not yet true or false.
41. Aristotle *De generatione et corruptione* 2.11.337b2-3.
42. Ibid. 2.11.337b4-9 (Ross ed. trans.).
 “... καὶ εὐθὺς τὸ ἔσται καὶ τὸ μέλλον ἔτερον διὰ τοῦτο· ὁ μὲν γὰρ ἀληθὲς εἰπεῖν ὅτι ἔσται, δεῖ τοῦτο εἶναι ποτε ἀληθὲς ὅτι ἔστιν· ὁ δὲ νῦν ἀληθὲς εἰπεῖν ὅτι μέλλει, οὐδὲν κωλύει μὴ γενέσθαι· μέλλων γὰρ ἂν βαδίζειν τις οὐκ ἂν βαδίσειεν. ὅλως δ’, ἐπεὶ ἐνδέχεται ἔνια τῶν ὄντων καὶ μὴ εἶναι, δηλὸν ὅτι καὶ τὰ γινόμενα οὕτως ἔξει, καὶ οὐκ ἐξ ἀνάγκης τοῦτ’ ἔσται.”
43. Ibid. 2.11.337b10.
44. Ibid. 2.11.337b23.
45. Ibid. 2.11.337b34-338a4.
 “... δεῖ τῇ γενέσει αἰεὶ εἶναι, εἰ ἐξ ἀνάγκης αὐτοῦ ἐστὶν ἡ γένεσις· τὸ γὰρ ἐξ ἀνάγκης καὶ αἰεὶ ἄμα. ὁ γὰρ εἶναι ἀνάγκη οὐχ οἷον τε μὴ εἶναι. ὥστ’ εἰ ἔστιν ἐξ ἀνάγκης, αἰδῖον ἐστὶ, καὶ εἰ αἰδῖον, ἐξ ἀνάγκης, καὶ εἰ ἡ γένεσις τοῖνον ἐξ ἀνάγκης, αἰδῖος ἡ γένεσις τούτου, καὶ εἰ αἰδῖος, ἐξ ἀνάγκης.”
46. Aristotle *Metaphysica* E.2.1026b27-32.
47. Ibid. E.3.1027a29-b6 (Ross ed. trans.)
 ““Ὅτι δ’ εἰσὶν ἀρχαὶ καὶ αἷτια γεννητὰ καὶ φθαρτὰ ἄνευ τοῦ γίγνεσθαι καὶ φθεῖρεσθαι, φανερόν. εἰ γὰρ μὴ τοῦτ’, ἐξ ἀνάγκης πάντ’ ἔσται, εἰ τοῦ γιγνομένου καὶ φθειρομένου μὴ κατὰ συμβεβηκὸς αἰτίον τι ἀνάγκη εἶναι. πότερον γὰρ ἔσται τοδὶ ἢ οὐ; ἐάν γε τοδὶ γένηται· εἰ δὲ μὴ, οὐ. τοῦτο δὲ ἂν ἄλλο. καὶ οὕτω δηλὸν ὅτι αἰεὶ χρόνον ἀφαιρουμένου ἀπὸ πεπερασμένου χρόνου ἤξει ἐπὶ τὸ νῦν· ὥστε ὁδὶ ἀποθανεῖται [νόσω ἢ] βίᾳ, ἐάν γε ἐξέλθῃ· τοῦτο δὲ ἐάν διψῇ· τοῦτο δὲ ἐάν ἄλλο· καὶ οὕτως ἤξει εἰς ὃ νῦν ὑπάρχει, ἢ εἰς τῶν γεγονότων τι. οἷον ἐάν διψῇ· τοῦτο δ’ εἰ ἐσθίει δρῦμέα· τοῦτο δ’ ἦτοι ὑπάρχει ἢ οὐ· ὥστ’ ἐξ ἀνάγκης ἀποθανεῖται ἢ οὐκ ἀποθανεῖται.”
- Cf. the parallel passage in *ibid.* K.8.106415.1065a-20.
48. See Ross’s helpful commentary on this section. He points out that for Aristotle not only voluntary acts of agents are accidental causes, but he recognizes “an initiative in unconscious nature analogous to that which he allows to man.” (W. D. Ross, *Aristotle’s Metaphysics*, 2 vols. [Oxford: Clarendon Press, 1924], 1:363.) Hence, it may be that rectilinear causal sequences are inherently infected with contingency.

- Elsewhere Ross, commenting on *De interpretatione* 9, *Metaphysics* E.3, and *De generatione* 2.11, concludes that the only events of which absolute necessity can be predicated are those which form part of a recurrent series, such as the motion of the heavenly bodies or the change of seasons. Yet, he muses it seems doubtful that this is Aristotle's "real thought." (Ross, *Aristotle*, p. 81.) He doubts whether there is any true contingency in the Aristotelian universe.
49. Aristotle *Metaphysica* E.3.1027b8. Although this looks like the conclusion from the assumption Aristotle wants to refute (Ross, *Metaphysica*, 1:363), he actually concurs with it and gives an example to show his meaning. Cf. the example of the eclipse in *Metaphysica* K.8.1065a16, which also serves to illustrate the necessity Aristotle envisions. The examples suggest that Aristotle has not departed from the position of *De generatione* that all necessary causal sequences are cyclical.
 50. Aristotle *De interpretatione* 9.19a.10, 21-3. Cf. *Metaphysica* K.8.1065a12-13, where he equates happening $\xi\zeta \acute{\alpha}\nu\acute{\alpha}\gamma\chi\eta\varsigma$ with the removal of change and of the possibility of something's either occurring or not occurring. Since events that happen for the most part have that possibility, they do not occur necessarily. Hence, the only events which occur necessarily must be those in everlasting cyclical processes.
 51. On this basis, Michael White asserts that Aristotle does not separate causal determinism and fatalism. *De interpretatione* 9 makes the same point from a semantic perspective as *Metaphysica* E.3: if a proposition pertaining to the future is to be now true or false, then it must already be determined by the facts that now obtain. Hence, Aristotle's argument for fatalism does not commit the modal fallacies of modern versions, for when he asserts that if "There will be a sea battle tomorrow" is true, then it must occur necessarily, he means that a necessary condition for the truth of that statement is that the event in question is now causally determined and hence bound to happen. (Michael J. White, "Fatalism and Causal Determinism: an Aristotelian Essay," *Philosophical Quarterly* 31 [1981]: 231-41.) Though White is correct in arguing that future singular propositions are not true or false on Aristotle's view unless they are causally necessary, he fails, I think, to recognize that for Aristotle only events in everlasting cyclical processes are causally necessary, so that the range of true future singular propositions is even more restricted than he suspects. Moreover, he never justifies his claim that the argument for fatalism in *De interpretatione* 9 is an argument for causal determinism and not an argument for logical fatalism based only on the antecedent truth of future singular propositions. See our discussion of the relevant passage.
 52. Hintikka, "Sea Fight," p. 463. His several papers on this area have been revised and collected into a convenient volume, Jaakko Hintikka, *Time & Necessity: Studies in Aristotle's Theory of Modality* (Oxford: Clarendon Press, 1973). His view is embraced enthusiastically by Michael J. White, "Aristotle and Temporally Relative Modalities," *Analysis* 39 (1979): 88-91 and idem, "Necessity and Unactualized Possibilities in Aristotle," *Philosophical Studies* 38 (1980): 287. A good capsule summary of Hintikka's position may be found in Robert Trundle, "De Interpretatione IX: The Problem of Future Truth or of Infinite Past Truth?" *Modern Schoolman* 59 (1981):49-55.
 53. Jaakko Hintikka, "Aristotle and the 'Master Argument' of Diodorus," *American Philosophical Quarterly* 1 (1964):102. See Aristotle *Topica* 2.6.112b1; 2.11.115b17-18; 6.6.145b24; *Physica* 3.4.203b30; 3.7.207b17; 4.12.221b23; *De generatione et corruptione* 2.9.335a34; *De partibus animalium* 1.5.644b21-3; *Metaphysica* 9.3.1047a10-14; 9.4.1047b3-6; 11.8.1064b32; *Ethica Nicomachea* 3.2.1111b32.
 54. Hintikka, *Time & Necessity*, pp. 100-1.
 55. Ibid., p. 96.
 56. Ibid.
 57. See Aristotle *Metaphysica* N.2.1088b23-5; *De caelo* 1.12.281a28-28a25; *De generatione et corruptione* 2.11.338a1-3; *Metaphysica* Θ.8.1050b7-8, 20; Θ.3.1047a12-14; *Topica* 2.11.115b17-18; *Physica* 3.4.203b30; 4.12.221b25-22a9; *Metaphysica* Θ.4.1047b3-6.
 58. Hintikka, *Time & Necessity*, pp. 100-1.

59. Ibid., pp. 136-145.
60. Hintikka, "Sea Fight," p. 465. See especially Aristotle *Metaphysica* Θ.3.1047a10-14; *De caelo* 1.12.282a27.
61. Ibid., p. 467.
62. Ibid., p. 487.
63. Ibid., p. 480.
64. Frede, *Aristoteles und die "Seeschlacht"*, pp. 28, 31-2, 49, 70, 90-1.
65. On Aristotle's linguistic modalities, see Michael T. Ferejohn, "Aristotle on Necessary Truth and Logical Priority," *American Philosophical Quarterly* 18 (1981): 285-93. He concludes that Aristotle equates necessary truth with definitional truth (*per se* predication) and contingent or non-definitional truth with *per accidens* predication.
66. Aristotle *Metaphysica* Θ.10.1051b13-16.

“περὶ μὲν οὖν τὰ ἐνδεχόμενα ἡ αὐτὴ γίγνεται ψευδὴς καὶ ἀληθὴς δόξα καὶ ὁ λόγος ὁ αὐτός, καὶ ἐνδέχεται ὅτε μὲν ἀληθεύειν ὅτε δὲ ψεύδεσθαι· περὶ δὲ τὰ ἀδύνατα ἄλλως ἔχειν οὐ γίγνεται ὅτε μὲν ἀληθὲς ὅτε δὲ ψεῦδος, ἀλλ’ αἰεὶ ταῦτά ἀληθὴ καὶ ψευδῆ.
67. Frede writes,

“It seems plausible indeed to believe, like Hintikka, that for Aristotle ‘necessary’ and ‘always true’ are equivalent; but this view is not entirely correct. For Aristotle—and this seems to me to be a small but important difference—it is much more that which always *is* or always *is as it is* which is equated with the necessary (Met. Θ.8).... Granted, Aristotle would certainly call statements about αἰεὶ ὄντα also ‘always true’ *a fortiori*, but that does not justify conversely the assumption that things are necessary when statements about them are ‘Always true.’...
 ...But this seems to me to be the point upon which everything depends. None of the determinations [*Bestimmungen*] which we find in Aristotle prevents us from assuming that clearly determinate singular statements could for Aristotle be ‘always true’, even if the things they are about are not necessary.” (Frede, *Aristoteles und die "Seeschlacht"*, pp. 49, 91.)
68. Hintikka, *Time & Necessity*, p. 168.
69. Ibid., p. 169.
70. Ibid., p. 152.
71. Hintikka, "Sea Fight," p. 483.
72. Cf. Aristotle *Metaphysica* E.3.102766-8, where he similarly traces the future event back to a present or a past state of affairs.
73. Hintikka, "Sea Fight," pp. 464-5.
74. This same consideration weighs against Hintikka's taking αἰεὶ as meaning “necessary” here. For then we have the redundancy that universals are necessarily necessarily true or false, i.e., $\Box(\Box p \vee \Box \sim p)$.
75. Ackrill, *Aristotle's "De interpretatione"*, p. 139.
76. See Frede, *Aristoteles und die "Seeschlacht"*, pp. 27-31.
77. Ackrill, *Aristotle's "De interpretatione"*, p. 139.
78. Anscombe, "Sea Battle," pp. 2-3. Ross notes that while the Bekker text reads καὶ, he prefers the reading ἦ, which is that of B, C, Ammonius, and Waitz, because the phrase occurs in the same sense in 18a29, 64.
79. Ackrill, *Aristotle's "De interpretatione"*, p. 135; Frede, *Aristoteles und die "Seeschlacht"*, p. 10.
80. Frede, *Aristoteles und die "Seeschlacht"*, p. 21.
81. Anscombe, "Sea Battle," p. 3.
82. Strang, "Sea Battle," p. 450.
83. Ackrill, *Aristotle's "De interpretatione"*, p. 136.
84. Aristotle *Physica* 2.5.196b10-17. Cf. *Analytica posteriora* 2.12.96a8-10.
85. White, "Fatalism and Causal Determinism," p. 236.
86. It seems unnecessary, with Frede, to distinguish ἀπο τύχης (seldom) from ὁπότερ' ἔτυχε (equi-possible). (Frede, *Aristoteles und die "Seeschlacht"*, p. 60). The first phrase means “by chance” and the latter “whichever chances to be” (from τυγχάνω). They seem to be to synonymous.

87. Anscombe, "Sea Battle," p. 3, has a very peculiar interpretation of this phrase: whichever happens is not more thus or not thus than it is going to be; in other words, the present is not any more determinate than the future. For a brief critique, see Strang, "Sea Battle," p. 451.
 88. Frede, *Aristoteles und die "Seeschlacht,"* p. 43.
 89. See good discussion in *ibid.*, pp. 62-3.
 90. Malcolm F. Lowe, "Aristotle on the Sea-Battle: a Clarification," *Analysis* 40 (1980): 55. Lowe thinks the accounts given by Ackrill and Hintikka of Aristotle's reasoning in this chapter are *both* substantially correct!
 91. Steven M. Cahn, *Fate, Logic, and Time* (New Haven: Yale University Press, 1967), pp. 27-8. See also Richard Taylor, "The Problem of Future Contingencies," *Philosophical Review* 66 (1957): 4.
 92. See, for example, Thomas Aquinas *Quaestiones disputatae* 2.12 ad 7; *Summa theologiae* 1a.14.13. ad 2. Aquinas did not attribute this argument to Aristotle, nor in his commentary on *De interpretatione* does he regard Aristotle's argument in 18b9-16 as based on the necessity of the past (Thomas Aquinas *In perihermeneias* 13.10).
 93. Aristotle *De interpretatione* 9.18b.37-8; 19a2.
 94. *Ibid.* 9.19a4-6.
 95. McKim, "Fatalism and the Future," pp. 94-7.
 96. Frede, *Aristoteles und die "Seeschlacht,"* p. 51.
 97. Strang, "Sea Battle," p. 451.
 98. Anscombe, "Sea Battle," p. 4; Strang, "Sea Battle," p. 452; Hintikka, "Sea Fight," p. 482; on the fence is Spellman, "Exegetical Stalemate," p. 117. Cf. Waterlow, *Passage and Possibility*, p. 107, for the view that Aristotle holds that in an *antiphrasis* of future contingent propositions we have $T \vee I$.
 99. Strang, "Sea Battle," pp. 452-3.
 100. Ackrill, *Aristotle's "De interpretatione"*, p. 136.
 101. See useful comments by Cahn, *Fate*, pp. 19-20.
 102. Kneale and Kneale, *Development of Logic*, p. 51.
 103. Frede, *Aristoteles und die "Seeschlacht"*, pp. 50-51.
 104. See Hintikka, "Sea Fight," pp. 464-5. See also Aristotle *Categoriae* 5.3134-b2; 4123-30; *Metaphysica* Θ .10.1051613.
 105. M. Kneale, "Eternity and Sempiternity," *Proceedings of the Aristotelian Society* 69 (1968-9): 228. See also R. D. Bradley, "Must the Future Be What it is Going to Be?," *Mind* 68 (1959): 199, 203; Rescher, "Truth and Necessity," p. 185; R. C. Jeffry, "Coming True," in *Intention and Intentionality*, ed. Cora Diamond and Jenny Teichman (Brighton, England: Harvester Press, 1979), p. 251; Haack, *Deviant Logic*, pp. 82-3: "For if a proposition is true, it is, on the no change of truth value thesis, always true. And if a proposition is always true, it is, in particular, *now* true."
- On the other hand, von Wright insists that "it is true that" is strictly atemporal, and that "Atemporality must not, however, be confused with omnitemporality. It is therefore misleading to say that, if it is true that p at t , then it is *now and always* true that p at t ." (G. H. von Wright, "Time, Truth and Necessity," in *Intention and Intentionality*, p. 241). So it is misleading to say that 10,000 years ago it was true that there would be a sea battle. Without wishing at this point to get involved in a critical discussion of the argument, one might, nevertheless, question whether even this strikes at the heart of Aristotle's argument. For, as von Wright admits, "But it is of course true and in no way misleading to say that, if there is going to be a sea battle tomorrow, then a man who 10,000 years ago had predicted or said that there was going to be a sea battle on that future day would have been *right*, i.e., would have spoken the truth." (*Ibid.*). But this seems sufficient for Aristotle's purposes: since 10,000 years ago it was, or could have been, truly asserted that S would obtain, S must eventually obtain. For what is truly asserted must correspond with reality.
106. Aristotle *Metaphysica* Θ .4.1047b4; *De caelo* 1.11-12.
 107. Hintikka, *Time & Necessity*, pp. 100-1, 171-2; Frede, *Aristoteles und die "Seeschlacht"*, pp. 109-10.

108. Pace Strang, "Sea Battle," p. 458, who thinks Aristotle is speaking of causal necessity in 19a7-22 and temporal necessity in 19a23-7. Strang cannot explain why if Aristotle is speaking of causal necessity, he restricts his discussion to *future* contingents.
109. Hintikka, "Sea Fight," p. 486.
110. Rescher, "Truth and Necessity," p. 188.
111. Frede, *Aristoteles und die "Seeschlacht,"* pp. 60-3.
112. Ibid., pp. 60-1; Hintikka, "Sea Fight," p. 486.
113. Frede, *Aristoteles und die "Seeschlacht,"* p. 60.
114. Hintikka, "Sea Fight," p. 469.
115. See also comments in Ackrill, *Aristotle's "De interpretatione,"* p. 138. He divides the section in two with two subdivisions in the first part.
116. Lowe, "Sea Battle," pp. 55-6.
117. Strang, "Sea Battle," pp. 460-1; Rescher, "Truth and Necessity," pp. 211-12; Ackrill, *Aristotle's "De interpretatione,"* pp. 139-40.
118. Hintikka, "Sea Fight," p. 473. See Aristotle *Analytica priora* 1.15.34b-7-11; 17-18; *De interpretatione* 1.16a18; *Topica* 1.5.102a25-6; *De anima* 3.10.433b9; *De partibus animalium* 1.1.639b25; *Metaphysica* 5.5.1015b11-14.
119. C. J. F. Williams, "What Is, Necessarily Is, When It Is," *Analysis* 40 (1980): 128.
120. Łukasiewicz, *Aristotle's Syllogistic*, p. 151.
121. Aristotle *Analytica priora* 1.10.30b32.
122. This would appear to render unlikely a possible revision of the second interpretation. It could be contended that the $\delta\tau\alpha\upsilon$ is indeed temporal and Aristotle means, " \Box (whatever is, is, when it is)." This does not strike at the heart of the fatalistic difficulty and therefore does not render the remainder of III superfluous, nor the chapter unintelligible. It merely shows the fatalist that not everything is of necessity unqualifiedly, for though it is necessary that everything exist when it exists, it does not exist necessarily. Hence, both III.A and B involve the "same account" of the modal shift. But the $\epsilon\lambda\lambda' \alpha\nu\acute{\alpha}\gamma\chi\eta\varsigma$ makes it implausible to take the necessity as belonging to the *dictum* as a whole. Otherwise, I must admit, this option is attractive and could be correct.
123. This also exposes Williams's error, when he asserts that Aristotle's saying only past/present propositions are temporally necessary fails to solve the problem because the statement "It was true yesterday that p would happen" is a past proposition and hence necessary. (C. J. F. Williams, "True Tomorrow, Never True Today," *Philosophical Quarterly* 28[1978]:291.) But Aristotle applies temporal necessity to *things*, not propositions.
124. Leonard Linsky, "Professor Donald Williams on Aristotle," *Philosophical Review* 63 (1954): 250-2; Anscombe, "Sea Battle," pp. 7-8; Strang, "Sea Battle," pp. 459-62; Hintikka, "Sea Fight," pp. 478-83; Spellman, "Exegetical Stalemate," p. 118; Lowe, "Sea-Battle," p. 58; cf. Waterlow, *Passage and Possibility*, pp. 86, 107.
125. Williams, "Sea Fight," p. 290; idem, "Linsky on Aristotle," pp. 253-5; Kneale and Kneale, *Development of Logic*, p. 47; Cahn, *Fate*, pp. 107-12.
126. Aristotle *Categories* 10.13a4-13 (Ackrill trans.)
 $\text{"\omicron\upsilon\tau\epsilon \gamma\acute{\alpha}\rho \acute{\alpha}\iota \tau\omega \delta\epsilon\kappa\tau\iota\kappa\omega \alpha\nu\alpha\gamma\chi\alpha\iota\omicron\nu \theta\acute{\alpha}\tau\epsilon\rho\omicron\nu \alpha\upsilon\tau\omega\nu \upsilon\pi\acute{\alpha}\rho\chi\epsilon\iota\nu, - \tau\omicron \gamma\acute{\alpha}\rho \mu\acute{\eta}\pi\omega \pi\epsilon\phi\upsilon\kappa\omicron\varsigma \delta\phi\iota\nu \acute{\epsilon}\chi\epsilon\iota\nu \omicron\upsilon\tau\epsilon \tau\upsilon\phi\lambda\omicron\nu \omicron\upsilon\tau\epsilon \delta\phi\iota\nu \acute{\epsilon}\chi\omicron\nu \lambda\acute{\epsilon}\gamma\epsilon\tau\alpha\iota \dots \alpha\nu\alpha\gamma\chi\alpha\iota\omicron\nu \gamma\acute{\alpha}\rho \pi\omicron\tau\epsilon \pi\alpha\nu\tau\iota \tau\omega \delta\epsilon\kappa\tau\iota\kappa\omega \theta\acute{\alpha}\tau\epsilon\rho\omicron\nu \alpha\upsilon\tau\omega\nu \upsilon\pi\acute{\alpha}\rho\chi\epsilon\iota\nu. \delta\tau\alpha\nu \gamma\acute{\alpha}\rho \eta\delta\eta \pi\epsilon\phi\upsilon\kappa\omicron\varsigma \eta \delta\phi\iota\nu \acute{\epsilon}\chi\epsilon\iota\nu, \tau\omicron\tau\epsilon \eta \tau\upsilon\phi\lambda\omicron\nu \eta \delta\phi\iota\nu \acute{\epsilon}\chi\omicron\nu \acute{\epsilon}\rho\eta\theta\acute{\eta}\sigma\epsilon\tau\alpha\iota, \kappa\alpha\iota \tau\omicron\upsilon\tau\omega\nu \omicron\upsilon\kappa \acute{\alpha}\phi\omega\rho\iota\sigma\mu\acute{\epsilon}\nu\omega\varsigma \theta\acute{\alpha}\tau\epsilon\rho\omicron\nu, \acute{\alpha}\lambda\lambda' \acute{\omicron}\pi\omicron\tau\epsilon\rho\omicron\nu \acute{\epsilon}\tau\upsilon\chi\epsilon\nu, - \omicron\upsilon \gamma\acute{\alpha}\rho \alpha\nu\alpha\gamma\chi\alpha\iota\omicron\nu \eta \tau\upsilon\phi\lambda\omicron\nu \eta \acute{\epsilon}\chi\omicron\nu \delta\phi\iota\nu \acute{\epsilon}\iota\nu\alpha\iota, \acute{\alpha}\lambda\lambda' \acute{\omicron}\pi\omicron\tau\epsilon\rho\omicron\nu \acute{\epsilon}\tau\upsilon\chi\epsilon\nu\text{"}}$
127. Frede concludes that for Aristotle Excluded Middle pertains only to the time when a thing exists; but the Principle of Bivalence is timeless and unless restricted applies regardless of tense. Hence, Aristotle restricts only Bivalence. As for the *antiphrasis* of future contingent singular propositions, there is no indication that Aristotle held that disjunctions or hypotheticals have truth value. (Frede, *Aristoteles und die "Seeschlacht"*, pp. 75-7.) I find this very unconvincing. Frede restricts Excluded Middle to things only, but Aristotle undoubtedly applied it to statements as well,

as in III.C. Hence, it must be restricted as much as Bivalence. Her argument that (pv^*p) has no truth value is an argument from silence. Aristotle just did not treat disjunctions and hypotheticals as distinct types from the categorical; and he did attribute truth value to conjunctions. (Ross, *Aristotle*, pp. 31-2.) So what reason is there to doubt he regarded disjunctions as true or false?

As for Williams's complaint that it is inconsistent to deny the truth of future propositions and yet say it is true that "They *will* become true or false", since this is itself a future proposition (Williams, "Sea Fight," p. 297), one could reply that logical truths are not genuine predictions (C. K. Grant, "Certainty, Necessity and Aristotle's Sea Battle," *Mind* 66 [1957]:528) or that this is in any case not a contingent singular proposition.

128. See Nicholas Rescher, *Many-valued Logic* (New York: McGraw-Hill, 1969), pp. 149-52.
129. Rescher, *Arabic Logic*, p. 51; Hintikka, "Sea Fight," p. 462; McKim, "Fatalism and the Future," p. 102; Spellman "Exegetical Stalemate," pp. 118-19. *Contra*, Celluprica, *Il capitolo* 9, p. 68, who calls this argument "relatively weak."
130. Frede, *Aristoteles und die "Seeschlacht"*, pp. 67-8; also Anscombe, "Sea Battle," p. 7.
131. Strang, "Sea Battle," p. 460; Rescher, "Truth and Necessity," p. 189.
132. Frede, *Aristoteles und die "Seeschlacht"*, pp. 70-1.
133. So I. M. Bochenski, *A History of Formal Logic*, trans. and ed. Ivo Thomas (Notre Dame, Ind.: University of Notre Dame Press, 1961), p. 63. So also Celluprica: "Now as the things pass from potency to act, so the propositions should pass from one state in which they are potentially susceptible of a truth value to one in which they have an actual truth value that cannot be other than true or false." (Celluprica, *Il capitolo* 9, p. 73.)
This seems to me a better way of putting it than Frede's, who implies, inconsistently, that Bivalence and Excluded Middle hold for future contingents, but that a decision is not possible concerning truth and falsity. (Frede, *Aristoteles und die "Seeschlacht"*, pp. 71-2.) This sounds more like Aristotle means "...the truth-value of a contingent proposition about the future is not *now* (i.e., actually or already) decideable and therefore cannot *now* be rightly called, or asserted to be, true (false)." (McKim, "Fatalism and the Future," p. 100.) But there are no grounds for thinking that Aristotle equated indeterminacy with undecideability; nor does he say that future contingent singular propositions cannot be rightly asserted to be true—he says they *are* not yet true.
134. The parallelism in the Greek is clear from the two οὐ μέντοι. Two parallel statements are said to be necessary, and both are qualified οὐ μέντοι. Again we have the troublesome μάλλον here, so that the meaning could be "more true than the other." But even if one takes it here to mean that one alternative is more probably true than the other, that does not affect the conclusion, which is that neither is already true or false. I think it best to translate it as "rather," since there is no evidence that Aristotle is speaking here of things that happen for the most part. Moreover, the statement about chance events on the other reading would be very peculiarly put, for one would expect a weaker statement about their truth value to be made.
135. Anscombe, "Sea Battle," p. 8; Rescher, "Truth and Necessity," p. 190; cf. Ackrill, *Aristotle's "De Interpretatione"*, p. 141; Frede, *Aristoteles und die "Seeschlacht"*, pp. 72-3.
136. See E. J. Lemmon, "G. E. M. Anscombe. *Aristotle and the Sea Battle*," *Mind*, 65 (1956):389; Hintikka, "Sea Fight," p. 489, who points to Aristotle's explanation of ᾗδῃ in temporal terms in *Physica* 4.13.222b7; cf. *Metaphysica* Γ.3; *De interpretatione* 13.23a14 and remarks that it would have been "uncharacteristically careless" for Aristotle to use the word in a non-temporal sense in the midst of a discussion charged with temporal notions. See also Von Wright, "Truth and Necessity," p. 240.
137. See Łukasiewicz, *Aristotle's Syllogistic*, p. 156; Ross, *Aristotle*, p. 26; Taylor, "Future Contingencies," 3, 16; Frede, *Aristoteles und die "Seeschlacht"*, p. 66; McKim,

- "Fatalism and the Future," p. 103; Dickason, "Sea Fight," p. 20-1; White, "Fatalism and Causal determinism," pp. 233-6.
138. Ackrill, *Aristotle's "De Interpretatione,"* pp. 140-1.
139. Frede, *Aristoteles und die "Seeschlacht,"* p. 72-3.

NOTES TO CHAPTER TWO

1. See J. Isaac, *Le 'Peri hermeneias' en occident de Boèce à saint Thomas*, Bibliothèque thomiste 29 (Paris: J. Vrin, 1953), p. 13.
2. See José Oroz Reta, "Une polémique augustinienne contre Cicéron: du fatalisme à la prescience divine," *Augustinian Studies* 12 (1981):19-41.
3. Dorothea Frede, *Aristoteles und die "Seeschlacht,"* Hypomnemata 27 (Göttingen: Vandenhoeck & Ruprecht, 1970), pp. 113, 121-2.
4. Ammonius *In Aristotelis De interpretatione commentarius* 132.8-9.
5. Origen *Contra Celsum* 2.18-20.
6. Léon Baudry, *La querelle des futurs contingents*, Etudes de philosophie médiévale 38 (Paris: Librairie philosophique J. Vrin, 1950), p. 9.
7. Augustine *De civitate Dei* 5.9.14. References to Augustine's works are to the texts in the *Corpus Christianorum: Series Latina*; English citations of *The City God* are from the Green translation.
8. Ibid. 5.9.157-8. "Qui enim non est praescius omnium futurorum, non est utique Deus."
9. Augustine *Retractiones* 1.9.1. See Étienne Gilson, *The Christian Philosophy of Saint Augustine*, trans. E. M. Lynch (London: Victor Gollancz, 1961), pp. 143-8.
10. Augustine *Retractiones* 1.9.4-6. For an enlightening discussion on Augustine's view of human freedom after the Fall, see John M. Rist, "Augustine on Free Will and Predestination," in *Augustine: A Collection of Critical Essays*, ed. R. A. Markus, Modern Studies in Philosophy (Garden City, N. Y.: Doubleday; Anchor Books, 1972), pp. 218-52. Although Rist concludes that for Augustine, "... man is a puppet, free in the sense only of being arranged to act in a way which is not subject to external pressures," he recognizes that Adam before the Fall was free to choose the good, so that our discussion need not take into account Augustine's doctrine of depravity. (Ibid., pp. 229-30, 241).
11. Augustine *De libero arbitrio* 1.1.1.4-6. The line numbers correspond to the Latin text.
12. Ibid. 1.1.1.20. "...sed quisque malus sui malefacti auctor est." (Burleigh trans.)
13. Ibid. 1.1.1.22-3. "Non enim iuste undicarentur, nisi fierent uoluntate." (Burleigh trans.)
14. Ibid. 1.11.21.11-13. "...nulla res alia mentem cupiditatis comitem faciat quam propria uoluntas et liberum arbitrium." (Russell trans.)
15. Ibid. 1.16.34.16-20.
16. Ibid. 1.16.34.6-9. "...quisque sectandum et amplectendum eligat in uoluntate esse positum constitit nullaue re de arce dominandi rectoque ordine mentem deponi nisi uoluntate...." (Russell trans.)
17. Ibid. 1.16.35.33-4. "... id facimus ex libero uoluntatis arbitrio." (Russell trans.)
18. Ibid. 2.1.3.52-4. "Non enim aut peccatum esset aut recte factum quod non fieret uoluntate." (Burleigh trans.)
19. Ibid. 2.20.53.57-75.
20. Ibid. 2.20.54.29-31. "Qui tamen defectus quoniam est uoluntarius in nostra est positus potestate. Si enim times illum, oportet ut nolis; si autem nolis, non erit." (Burleigh trans.) On this doctrine, see Gilson, *Augustine*, pp. 147-8.
21. Augustine *De libero arbitrio* 3.1.1-3.
22. Ibid. 3.1.2.74-7. "...in potestate non habet lapis cohibere motum quo fertur inferius, animus uero dum non uult non ita mouetur et superioribus desertis inferiora diligit." (Burleigh trans.)
23. Ibid. 2.20.54.32-6; cf. *Retractiones* 1.9.6.

24. Augustine *De libero arbitrio* 3.1.3.92-104.

"...quid autem meum dicam prorsus non inuenio si uoluntas qua uolo et nolo non est mea. Quapropter cui tribuendum est si quid per illam male facio nisi mihi? ... Motus autem quo huc aut illuc uoluntas conuertitur, nisi esset uoluntarius atque in nostra positus potestate, neque laudandus cum ad superiora neque culpandus homo esset cum ad inferiora detorquet quasi quendam cardinem uoluntatis; neque omnino monendus esset ...ut male nollet uiuere, uellet autem bene." (Russell trans.)

25. Ibid. 3.1.2.82-8.

26. Ibid. 3.2.4.1-16.

"...ineffabiliter me mouet quo modo fieri possit ut et deus praescius sit omnium futurorum et nos nulla necessitate peccemus. Quisquius enim dixerit aliter euenire aliquid posse quam deus ante praesciuit, praescientiam dei destruere insanissima impietate molitur. Quapropter, si praesciuit deus peccatum esse bonum hominem—quod necesse est concedat mihi quisquius mecum omnium futurorum praescium fatetur deum—..., necesse erat id fieri quod futurum esse praesciebat deus. Quo modo est igitur uoluntas libera ubi tam ineuitabilis apparet necessitas?" (Burleigh trans.)

27. 3.3.6.2-4. "deus praescius sit omnium futurorum et nos non necessitate, sed uoluntate peccemus." (Burleigh trans.)

28. William L. Rowe, "Augustine on Foreknowledge and Free Will," *Review of Metaphysics* 18 (1964-5):356-7. Cf. Plantinga's formulation:

"(1) If God knows in advance that *S* will do *A*, then it must be the case that *S* will do *A*.

(2) If it *must* be the case that *S* will do *A*, then it is not within the power of *S* to refrain from doing *A*.

(3) If then it is not within the power of *S* to refrain from doing *A*, then *S* is not free with respect to *A*.

Hence

(4) If God knows in advance that *S* will do *A*, then *S* is not free with respect to *A*." (Alvin Plantinga, "On Ockham's Way Out," *Faith and Philosophy* 3 [1986]: 235-69.)

29. Jasper Hopkins, "Augustine on Foreknowledge and Free Will," *International Journal for Philosophy of Religion* 8 (1977): 115.

30. Ibid., p. 116. Or perhaps because *erat* is past tense, Hopkins thinks it is the necessity of the consequent. But the past tense may be due only to the example's being in the past; cf. *necesse est* in 3.3.6.5 where the situation is present.

31. Augustine *De ciuitate dei* 5.9.37-9.

"...si praescita sunt omnia futura, hoc ordine uenient, quo uentura esse praescita sunt; et si hoc ordine uenient, certo est ordo rerum praescienti Deo; et si certus est ordo rerum, certus est ordo causarum; non enim fieri aliquid potest, quod non aliqua efficiens causa praecesserit; si autem certus est ordo causarum, quo fit omne quod fit, fato, inquit, fiunt omnia quae fiunt. Quod si ita est, nihil est in nostra potestate nullumque est arbitrium uoluntatis."

32. Ibid. 5.9.54-6. "si elegerimus praescientiam futurorum, tolli uoluntatis arbitrium; si elegerimus uoluntatis arbitrium, tolli praescientiam futurorum."

33. Augustine *In Iohannis Evangelium* 53.4

34. Ibid. 53.6

35. Augustine *De libero arbitrio* 3.3.6.22-50.

36. Augustine *Confessionum* 11.13.16; 11.31.41; idem *De trinitate* 4.1.3. Cf. Plotinus *The Enneads* 1.5.36.6-7; 3.7.45.1, 3, 5, 6, 11; Origen *De principiis* 1.2.11; 4.1.28.

37. Augustine *De libero arbitrio* 3.3.6.37. "Nihil ergo in sua creatura operatur deus." (Burleigh trans.)

38. Augustine *Confessionum* 11.10.12; idem *De ciuitate dei* 12.17-18. See discussion in Wilma Gundersdorf von Jess, "Divine Eternity in the Doctrine of St. Augustine," *Augustinian Studies* 6 (1975):80, 84.

39. Augustine *De trinitate* 5.6.17.
40. Augustine *De libero arbitrio* 3.3.6.48. "Iam ergo praescit hodie quod post annum facturus est." (Burleigh trans.)
41. Ibid. 3.3.7.61-5. "Non enim posses aliud sentire esse in potestate nostra, nisi quod cum uolumus facimus. Quapropter nihil tam in nostra potestate quam ipsa uoluntas est. Ea enim prorsus nullo interuallo mox et uolumus praesto est." (Russell trans.) Hopkins rightly criticizes Rowe for misconstruing Augustine's point here. He does not mean that to say a man's willing to sin is not in his power is to say that he wills to sin even though he does not will to sin. (Rowe, "Augustine on Foreknowledge," pp. 358-9.) Rather it would be to say that the man cannot move his will in the direction of not-sinching. For Augustine this is absurd because the will is inherently capable of being moved in alternate directions. When I will to do something, I will it of my own will, that is to say, the will has moved in that direction because I willed it to. That the object of the will is "something," as the translation renders it, and not the willing itself, as Rowe would have it, is discussed by Hopkins, "Augustine on Foreknowledge," pp. 119-23.
42. Ibid. 3.3.8.84-89.
"Attende enim, quaeso, quanta caecitate dicatur: 'Si praesciuit deus futuram uoluntatem meam, quoniam nihil potest aliter fieri quam praesciuit, necesse est ut uelim quod ille praesciuit; si autem necesse est, non iam uoluntate, sed necessitate id me uelle fatendum est.' O stultitiam singularem!" (Russell trans.)
43. Ibid. 3.3.8.93-5. "...qui necessitate supposita auferre nititur uoluntatem. Si enim necesse est ut uelit, unde uolet cum uoluntas non erit?" (Russell trans.)
44. Ibid. 3.3.8.107-8. "Voluntas igitur nostra nec uoluntas esset nisi esset in nostra potestate."
45. Ibid. 3.3.8.115-18. "Non igitur per eius praescientiam mihi potestas adimitur; quae propterea mihi certior aderit, quia ille cuius praescientia non fallitur adfuturam mihi esse praesciuit." (Russell trans.)
46. Augustine *De ciuitate dei* 5.9.95-102, 144-6, 158-62; 5.10.40-8, 58-64.
47. Augustine *De libero arbitrio* 3.3.8.119-21.
48. Augustine *De ciuitate dei* 5.10.6-10.
"Si enim necessitas nostra illa discenda est, quae non est in nostra potestate, sed etiamsi nolimus efficit quod potest, sicut est necessitas mortis: manifestum est uoluntates nostras, quibus recte uel perperam uiuitur, sub tali necessitate non esse."
49. Ibid. 5.10.13-28.
"Si autem illa definitur esse necessitas, secundum quam dicimus necesse esse ut ita sit aliquid uel ita fiat, nescio cur eam timeamus, ne nobis libertatem auferat uoluntatis. Neque enim et uitam Dei et praescientiam Dei sub necessitate ponimus, si dicamus necesse esse Deum semper uiuere et cuncta praescire.... Sic etiam cum dicimus necesse esse, ut, cum uolumus, libero uelimus arbitrio: et uerum procul dubio..., et non ideo ipsum liberum arbitrium necessitati subicimus, quae adimit libertatem."
50. Rowe, "Augustine on Foreknowledge," pp. 357-359. Similarly Hopkins, "Augustine on Foreknowledge," p. 117. For a non-compatibilist treatment see David De Celles, "Divine Prescience and Human Freedom in Augustine," *Augustinian Studies* 8 (1977):151-60.
51. Augustine *De libero arbitrio* 3.4.9.9-11.
52. Hopkins makes a great deal of the fact that Augustine does, not, as Rowe alleges, attribute to Evodius actual knowledge of the future; the argument is *ex hypothesi*. In fact, Augustine did not believe in human foreknowledge apart from special revelation. (Hopkins, "Augustine on Foreknowledge," pp. 124-5.) But while the argument is stated hypothetically, Hopkins's texts (*De ciuitate dei* 20.7; *Epistola* 73) do not strongly support the view that we have no knowledge of the future; they assert merely that we do not know how our lives are going to turn out in the future. Gerven claims that for Augustine there can be no strict foreknowledge in man because only

God has the eternal exemplar ideas by which He knows the future. (Joseph van Gerven, "Liberté humain et prescience divine d'après saint Augustin," *Revue philosophique de Louvain* 55 [1957]:324.) Gerven appeals to *Confessionum* 11.18.24 as proof that Augustine denies human foreknowledge; but the text says only that we do not *see* the future because it does not exist. It does not deny that we may have inferential knowledge of the future from present causes or signs.

53. Augustine *De libero arbitrio* 3.4.10.26-32.
 "...neque ipsa praescientia tua peccare eum cogeret quamvis sine dubio peccaturus esset.... Sicut itaque non sibi aduersantur haec duo, ut tu praescientia tua noueris quod alius sua uoluntate facturus est, ita deus, neminem ad peccandum cogens, praeuidet tamen eos qui propria uoluntate peccabunt." (Russell trans.)
54. Ibid. 3.4.11.33-6. "Sicut enim tu ememoria tua non cogis facta esse quae praeterierunt, sic deus praescientia sua non cogit facienda quae futura sunt." (Russell trans.)
55. De Celles, "Divine Prescience in Augustine," pp. 159-60.
56. For discussion see Karl Kolb, *Menschliche Freiheit und göttliches Vorherwissen nach Augustin* (Freiburg: Herder, 1908); Coelestin Zimara, "Die Eigenart des göttlichen Vorherwissens nach Augustinus," *Freiburger Zeitschrift für Philosophie und Theologie* 1 (1954):353-93; Gerven, "Prescience divine d'après saint Augustin," pp. 317-30.
57. Augustine *De diversis quaestionibus ad Simplicianum* 2.2.2.27-36.
 "Quid est enim praescientia nisi scientia futurorum? Quid autem futurum est deo, qui omnia tempora supergreditur? Si enim scientia dei res ipsas habet, non sunt ei futurae sed praesentes; ac per hoc non iam praescientia sed tantum scientia dici potest. Si autem sicut in ordine temporalium creaturarum ita et apud eum nondum sunt quae futura sunt, sed ea praeuenit sciendo, bis ergo ea sentit, uno quidem modo secundum futurorum praescientiam, altero uero secundum praesentium scientiam. Aliquid ergo temporaliter accidit scientiae dei, quod absurdissimum atque falsissimum est."
58. Augustine *Confessionum* 11.14.17.12-14. "Duo ergo illa tempora praeteritum et futurum, quomodo sunt, quando et praeteritum iam non est et futurum nondum est?"
59. Ibid. 11.15.18.6-7. "Praeteritum enim iam non est et futurum nondum est."
60. Ibid. 11.16.21.6-10. "...praeterita uero, quae iam non sunt, aut futura, quae nondum sunt, quis metiri potest, nisi forte audebit quis dicere metiri posse quod non est?"
61. Ibid. 11.17.22.12-8.
 "Quisnam est, qui dicat mihi non esse tria tempora,... praeteritum, praesens et futurum, sed tantum praesens, quoniam illa duo non sunt? An et ipsa sunt, sed ex aliquo procedit occulto, cum ex futuro fit praesens, et in aliquod recedit occultum, cum ex praesenti fit praeteritum? Nam ubi ea uiderunt qui futura cecinerunt, si nondum sunt? Neque enim potest uideri id quod non est...."
62. Ibid. 11.18.24.23. "...uideri nisi quod est non potest."
63. Ibid. 11.18.24.37-40. "Futura ergo nondum sunt, et si nondum sunt, non sunt, et si non sunt, uideri omnino non possunt; sed praedici possunt ex praesentibus, quae iam sunt et uidentur."
64. Ibid. 11.20.26.1-3. "Quod autem nunc liquet et claret, nec futura sunt nec praeterita, nec proprie dicitur: tempora sunt tria, praeteritum, praesens et futurum...."
65. Ibid. 11.19.25.3-6.
 "Quisnam ille modus est, quo doces futura, cum futurum quidquam non est? Vel potius de futuris doces praesentia? Nam quod non est, nec doceri utique potest. Nimis longe est modus iste ab acie mea; inualuit: ex me non potero ad illum...."
66. Ibid. 11.31.41.4-7. "Certe si est tam grandi scientia et praescientia pollens animus, cui cuncta praeterita et futura ita nota sint, sicut mihi unum canticum notissimum, nimium mirabilis est animus iste atque ad horrorem stupendus...."

67. Ibid. 11.31.41.10-13. "Sed absit, ut tu, conditor uniuersitatis..., absit, ut ita noueris omnia futura et praeterita. Longe tu, longe mirabilis longaque secretius."
68. Augustine *De diversis quaestionibus octoginta tribus* 17. "Omne praeteritum et futurum deest. Apud deum autem nihil deest, nec praeteritum igitur nec futurum, sed omne praesens est apud deum."
69. Plotinus *The Enneads* 5.1.4. (MacKenna trans.)
 "κόσμον αἰσθητὸν τόνδε εἴ τις θαυμάζει ..., ἐπὶ τὸ ἀρχέτυπον αὐτοῦ καὶ τὸ ἀληθινώτερον ἀναβάς κάκει πάντα ἰδέτω νοητὰ καὶ παρ' αὐτῷ αἰδία ... καὶ τούτων τὸν ἀκήρατον νοῦν προστάτην, καὶ σοφίαν ἀμήχανον, καὶ τὸν ὡς ἀληθῶς ἐπὶ Κρόνου βίον θεοῦ κόρου καὶ νοῦ ὄντος. Πάντα γὰρ ἐν αὐτῷ τὰ ἀθάνατα περιέχει, νοῦν πάντα, θεὸν πάντα, ... ἐστῶτα αἰεὶ. Τί γὰρ ζητεῖ μεταβάλλειν εὐ ἔχων; Ποῦ δὲ μετελθεῖν πάντα παρ' αὐτῷ ἔχων; Ἄλλ' οὐδὲ αὐξήν ζητεῖ τελειότατος ὢν. Διὸ καὶ τὰ παρ' αὐτῷ πάντα τέλεια, ἵνα πάντῃ ἡ τέλειος οὐδὲν ἔχων ὃ τι μὴ τοιοῦτον, οὐδὲν ἔχων ἐν αὐτῷ ὃ μὴ νοεῖ· νοεῖ δὲ οὐ ζητῶν, ἀλλ' ἔχων. ... ἀλλ' ἐν αἰῶνι πάντα, καὶ ὁ ὄντως αἰὼν, ὃν μιμεῖται χρόνος ... τὰ μὲν παρεῖς, τοῖς δὲ ἐπιβάλλων. Καὶ γὰρ ἄλλα καὶ ἄλλα αὐτῷ περὶ ψυχῇ· ποτὲ γὰρ Σωκράτης, ποτὲ δὲ ἵππος, ἐν τι αἰεὶ τῶν ὄντων. ὁ δὲ νοῦς πάντα. Ἐχει οὖν ἐν τῷ αὐτῷ πάντα ἐστῶτα ἐν τῷ αὐτῷ, καὶ ἔστι μόνον, καὶ τὸ ἔστιν αἰεὶ, καὶ οὐδαμοῦ τὸ μέλλον—ἔστι γὰρ καὶ τότε—οὐδὲ τὸ παρελθυθός—οὐ γὰρ τι ἐκεῖ παρελήλυθεν—ἀλλ' ἐνέστηκεν αἰεὶ ὅτε τὰ αὐτὰ ὄντα οἷον ἀγαπῶτα ἑαυτὰ οὕτως ἔχοντα. Ἐκαστον δὲ αὐτῶν νοῦς καὶ ὃν ἔστι καὶ τὸ σύμπαν πᾶς νοῦς καὶ πᾶν ὃν ..."
70. Augustine *De diversis quaestionibus* 46.2.21-32, 53-64.
 "Ideas igitur Latine possumus uel formas uel species dicere, ut uerbum e uerbo transferre uideamus. Si autem rationes eas uocemus, ab interpretandi quidem proprietate discedimus—rationes enim Graece λόγοι appellantur non ideae—, sed tamen quisquis hoc uocabula uti uoluerit, a re ipsa non abhorrebit. Sunt namque ideae principales quaedam formae uel rationes rerum stabiles atque incommutabiles, quae ipsae formatae non sunt ac per hoc aeternae ac semper eodem modo sese habentes, quae diuina intellegentia continentur. Et cum ipsae neque oriantur neque intereant, secundum eas tamen formari dicitur omne quod oriri et interire potest et omne quod oritur et interit....
 ...Has autem rationes ubi esse arbitrandum est nisi in ipsa mente creatoris? Non enim extra se quidquam positum intuebatur, ut secundum id constitueret quid constituebat; nam hoc opinari sacrilegum est. Quod si hae rerum omnium creandarum creaturarum rationes diuina mente continentur, neque in diuina mente quidquam nisi aeternum atque incommutabile potest esse,... sed ipsae uerae sunt, quia aeternae sunt et eiusdem modi atque incommutabiles manent. Quarum participatione fit ut sit quidquid est, quoquo modo est."
71. Augustine *De Genesi ad litteram* 5.14-19.
72. Zimara, "Des göttlichen Vorherwissens nach Augustinus," p. 389.
73. Ibid., p. 392. Cf. Gerven, "Prescience divine d'après saint Augustin," p. 321.

NOTES TO CHAPTER THREE

1. Boethius *Philosophiae consolations* 5.pr.3.6-16. (All citations of this work, unless otherwise indicated, are from the I.T. translation revised by H. F. Stewart).
 Nam si cuncta prospicit deus neque falli ullo modo potest, esunire necesse est quod prouidentia futurum esse praeuiderit. Quero si ab aeterno non facta hominum modo sed etiam consilia uoluntatesque praeuiderit, nulla erit arbitrii libertas; neque enim uel factum aliud ullum uel quaelibet existere poterit uoluntas nisi quam nescia falli prouidentia diuina praesenserit. Nam si aliorum quam prouisae sunt detorqueri ualent, non iam erit futuri firma praescientia, sed opinio potius incerta, quod de deo credere nefas iudico. (The text is Stewart's).
2. Origen *Contra Celsum* 2.20. (Chadwick trans.)
 Ὁ μὲν Κέλσους οἶται διὰ τοῦτο γίνεσθαι τὸ ὑπὸ τινὸς προγνώσεως θεοπισθῆν, ἐπεὶ ἐθεοπίσθη· ἡμεῖς δὲ, τοῦτο οὐ διδόντες, φαμέν οὐχὶ τὸν θεοπίσαντα αἴτιον εἶναι τοῦ

ἐσομένου, ἐπεὶ προεῖπεν αὐτὸ γενησόμενον, ἀλλὰ τὸ ἐσόμενον, ἐσόμενον ἂν, καὶ μὴ θεοπισθὲν, τὴν αἰτίαν τῷ προγιγνώσκοντι παρεσχηκέναι τοῦ αὐτὸ προεῖπειν...δυνατοῦ ὄντος τοῦδε τινος γενέσθαι, δυνατοῦ δὲ καὶ μὴ γενέσθαι, ἔσται τὸ ἕτερον αὐτῶν τότε τι. καὶ οὐ φαμεν, ὅτι ὁ προγιγνώσκων ὑφελὼν τὸ δυνατόν εἶναι γενέσθαι καὶ μὴ γενέσθαι οἶονεῖ τοιοῦτόν τι λέγει· τότε πάντως ἔσται καὶ ἀδύνατον ἐτέρως γενέσθαι.... Καὶ ὁ καλούμενός γε παρὰ τοῖς διαλεκτικοῖς ἀργὸς λόγος σόφισμα τυγχάνων, οὐκ ἔσται μὲν σόφισμα ὅσον ἐπὶ τῷ Κέλσῳ, κατὰ δὲ τὸν ὑγιῆ λόγον σόφισμά ἐστιν. (Text of J. -P. Migne, ed. *Patrologiae Graeca*, vol. 11 [Petit-Montrouge: 1857].)

3. Ibid. 2.18.
4. Ibid. 2.19. "τὸ γὰρ περὶ μελλόντων ἀληθὲς ταῖς ἐκβάσεσι κρίνεται."
5. Boethius *Philosophiae consolacionis* 5.pr.3.31-5. "Etenim si quispiam sedeat, opinionem quae eum sedere coniectat ueram esse necesse est; atque e conuerso rursus, si de quopiam uera sit opinio quoniam sedet, eum sedere necesse est."
6. Ibid. 5.pr.3.52-5. "Ad haec sicuti cum quid esse scio, id ipsum esse necesse est, ita cum quid futurum noui, id ipsum futurum esse necesse est. Sic fit igitur ut euentus praescitae rei nequeat euitari."
7. Ibid. 5.pr.3.63-5. "Ea namque causa est cur mendacio scientia careat, quod se ita rem quamque habere necesse est uti eam sese habere scientia comprehendit."
8. Boethius thereby rejects the opinion of Alexander of Aphrodisias. See Pierre Courcelle, *La "Consolation de Philosophie" dans la tradition litteraire*, Etudes augustinienes (Paris: Centre National de la Recherche Scientifique, 1967), p. 214; Peter Thomas Morus Huber, *Die Vereinbarkeit von göttlicher Vorsehung und menschlicher Freiheit in der "Consolatio Philosophiae" des Boethius* (Zurich: Juris Druck, 1976), p. 12.
9. Ibid. 5.pr.3.78-81. "Quod si apud illum rerum omnium certissimum fontem nihil incerti esse potest, certus eorum est euentus quar futura firmitur ute praescierit."
10. Ibid. 5.pr.4.1-4. See the discussion in Joachim Gruber, *Kommentar zu Boethius "De consolacione philosophiae"*, Texte und Kommentare 9 (Berlin: Walter de Gruyter, 1978), p. 396.
11. On the figure of Fate, see Howard Rollin Patch, "Fate in Boethius and the Neoplatonists," *Speculum* 4 (1929):62-72.
12. Courcelle, "Consolation," p. 212; so also Ernst Gegenschatz, "Die Gefährdung des Möglichen durch das Vorauswissen Gottes in der Sicht des Boethius," *Wiener Studien* 79 (1966): 517-30.
13. Marilyn McCord Adams, "The Problem of God's Foreknowledge and Free Will in Boethius and William Ockham," (Ph.D. dissertation, Cornell University, 1967), pp. 3, 5, 9, 18, 27, 33-6.
14. Huber, *Göttlicher Vorsehung und menschlicher Freiheit*, p. 58. "Gottes Vorsehung erkennt das zukünftig Mögliche als Gegenwärtiges in bedingter Notwendigkeit."
15. An. Manl. Sev. Boetii *In librum Aristoteles de interpretatione* (editio prima) 333 B-C. (All citations are from Adams's translation.)

Syllogismus aut huiusmodi est: si omnis affirmatio vera est aut false definite, et eodem modo negatio eveniet ut omnia inevitabili necessitatis ratione contingunt, quod si hoc est, liberum perit arbitrium. Sed hoc impossibile est, non igitur verum est omnem affirmationem vel negationem veram esse definite vel falsam. Omnia autem ex necessitate contingere, si illae definite verae vel falsae sunt, talis syllogismus ostendit: omnis in futurum definita veritas vel falsitas eventum rei vel futurum vel non futurum ex necessitate constituit, sed omnes propositiones futurae definite verae vel falsae sunt. In omnibus igitur eveniendi, vel non eveniendi necessitas erit..."

Cf. Ibid. (editio secunda) 495D-496B; 498A; 499A-B.

16. Dorothea Frede, *Aristoteles und die "Seeschlacht"*, Hypomnemata 27 (Göttingen: Vandenhoeck & Ruprecht, 1970), pp. 24-26. The terms *definite* and *determinate* are synonymous.
17. As is maintained by Malcolm Lowe, "Aristotle on the Sea-Battle: a Clarification," *Analysis* 40 (1980):58-9. He notes that Boethius claims that in a contradictory pair one is true and the other is false, but not *definitely* true or false and that he criticizes

- those who thought Aristotle meant future contingent propositions are neither true nor false. Lowe's references are ambiguous, however, since the Peripatetics did not affirm that truth is altogether absent from the *antiphrasis*: it is present, but indefinitely; i.e., both members are potentially true. Boethius's affirmation of Excluded Middle means that both propositions cannot come to be true or come to be false. Rescher himself agrees that Boethius adhered to the traditional interpretation. (Nicholas Rescher, "Truth and Necessity in Temporal Perspective," in *The Philosophy of Time*, ed. Richard M. Gale [New Jersey: Humanities Press, 1968], p. 185.)
18. Boethius *De interpretatione* (ed. prima) 340 B-D; (ed. secunda) 489A-D; 497C-D.
 19. Ibid. (ed. prima) 339D-340A; 340D; (ed. secunda) 490B-491A; 494B-495B; 501B.
 20. Ibid. (ed. secunda) 494C.
 21. Ibid. (ed. prima) 340 B-D; 330D-331C; 333B-C.
 22. Adams, "Foreknowledge in Boethius," p. 24. Cf. Boethius *De interpretatione* (ed. prima) 330D; 339D; (ed. secunda) 502A-B.
 23. Adams, "Foreknowledge in Boethius," pp. 25-6.
 24. Boethius *De interpretatione* (ed. prima) 334D-340A; (ed. secunda) 489C; 490B-D.
 25. Ibid. (ed. prima) 339D-340A; (ed. secunda) 490A-B.
 26. Ibid. (ed. prima) 331C; 333D-334A; 339D-340A; (ed. secunda) 490B-D; 494D-495A.
 27. Ibid. (ed. secunda) 506D-507C.
 28. Boethius *Philosophiae consolatio* 5.pr.3.13-16. "Nam si aliorum quam prouisae sunt detorqueri ualent, non iam erit futuri firma praescientia, sed opinio potius incerta, quod deo credere nefas iudico."
 29. Ibid. 5.pr.3.55-81.
 Postremo si quid aliquis aliorum atque sese res habet existimet, id non modo scientia non est, sed est opinio fallax ab scientiae ueritate longe diuersa. Quare si quid ita futurum est ut eius certus ac necessarius non sit euentus, id euenturum esse praesciri qui poterit? Sicut enim scientia ipsa impermixta est falsitati, ita id quod ab ea concipitur esse aliter atque concipitur nequit. Ea namque causa est cur mendacio scientia careat, quod se ita rem quamque habere necesse est uit eam sese habere scientia comprehendit. Quid igitur? Quonam modo deus haec incerta futura praenoscit? Nam si inuitabiliter euentura censet quae etiam non euenire possibile est, fallitur; quod non sentire modo nefas est, sed etiam uoce proferre. At si ita uti sunt, ita ea futura esse decernit, ut aequae uel fieri ea uel non fieri posse cognoscat, quae est haec praescientia quae nihil certum stabile comprehendit? ... Quid etiam diuina prouidentia humana opinione praestiterit, si uti homines incerta iudicat quorum est incertus euentus? Quod si apud illum rerum omnium certissimum fontem nihil incerti esse potest, certus eorum est euentus quae futura firmiter ille praescierit.
 30. Ibid. 5.pr.4.63-71.
 Sed hoc, inquis, ipsum dubitatur, an earum rerum quae necessarios exitus non habent ulla possit esse praenotio. Disonare etenim uidentur putaeque si praeuideantur consequi necessitatem, si necessitas desit minime praesciri nihilque scientia comprehendi posse nisi certum; quod si quae incerti sunt exitus ea quasi certa prouidentur, opinionis id esse caliginem non scientiae ueritatem. Aliter enim ac sese res habeat arbitrari ab integritate scientiae credis esse diuersum.
 31. Ibid. 5.pr.5.41-6
 Nam ita disseris: Si qua certos ac necessarios habere non uideantur euentus, ea certo euentura praesciri nequeunt. Harum igitur rerum nulla est praescientia, quam si etiam in his esse credamus, nihil erit quod non ex necessitate proueniat.
 32. Huber, *Göttlicher Vorsehung und menschlicher Freiheit*, p. 28.
 33. Boethius *Philosophiae consolatio* 5.pr.4.12-27.
 34. Ibid. 5.pr.4.26-7, "...manebit ut opinor eadem voluntatis integra atque absoluta libertas."
 35. Ibid. 5.pr.4.28-63.
 36. Ibid. 5.pr.4.63-71.

37. Ibid. 5.pr.4.72-5.pr.5.56.
38. For a discussion of the Neoplatonic background of these faculties, particularly intelligence, see Adams, "Foreknowledge in Boethius," pp. 39-58; Huber, *Göttlicher Vorsehung und menschlicher Freiheit*, pp. 40-4.
39. Boethius *Philosophiae consolatio* 5.pr.6.16-59.
40. Ibid. 5.pr.6.9-11. "Aeternitas...est interminabilis uitae tota simul et perfecta possessio...." (Stump-Kretzmann Trans.)
41. Eleonore Stump and Norman Kretzmann, "Eternity," *Journal of Philosophy* 78 (1981):432-3.
42. See Boethius *Philosophiae consolatio* 5.pr.4.89-91,100-04.
43. Ibid. 5.pr.6.12, 18-25. "uiuit in tempore." Cf. 5.pr.6.35-6. Khamara agrees that for Boethius "life" is a poetic substitute for "existence." (Edward J. Khamara, "Eternity and Omniscience," *Philosophical Quarterly* 24 [1974]:206.)
44. Boethius *Philosophiae consolatio* 5.pr.6.25-6. "interminabilis uitae plenitudinem totam."
45. Ibid. 5.pr.6.51, 61-2, 64. "manentis... semper aeternus ac presentarius status... manet simplicitate presentiae."
46. Stump and Kretzmann, "Eternity," p. 435.
47. Boethius *Trinitas unus deus ac non tres dii* 4.64-77.

Quod uero de deo dicitur "semper est," unum quidem significat, quasi omni praeterito fuerit, omni quoquo modo sit praesenti est, omni futuro erit. Quod de caelo et de ceteris immortalibus corporibus secundum philosophos dici potest, at de deo non ita. Semper enim est, quoniam "semper" praesentio est in eo temporis tantumque inter nostrarum rerum praesens, quod est nunc, interest ac diuinarum, quod nostrum "nunc" quasi currens tempus facit et sempiternitatem, diuinem uero "nunc" permanens neque mouens sese atque consistens aeternitatem facit; cui nomini si adicias "semper," facies euis quod est nunc iugem indefessumque ac per hoc perpetuum cursum quod est sempiternitas.

Stump and Kretzmann note two misleading aspects of this passage (1) that *semper* when applied to God has to do with present time; (2) that *sempiternitas* is compounded of *semper* + *aeternitas*—the word is in fact an abstract noun constructed directly on *semper*.
48. Stump and Kretzmann, "Eternity," p. 444.
49. Ibid., pp. 444-7.
50. The best example in favor of Stump and Kretzmann's view would be Proclus, whom they do not cite, for he did speak of eternity as having a sort of duration. See Proclus *Elements of Theology* F.52, 55; cf. his very fascinating comments on Plato's "μένοντος αἰώνιος ἐν ἐνί" in idem *Commentary on the Timaeus* 14.16-16.11. For a discussion see Werner Beirwaltes, *Proklos*, 2d rev. ed., Philosophische Abhandlungen 24 (Frankfurt am Main: Vittorio Klostermann, 1979), pp. 136-43. But Sorabji maintains that Proclus's understanding of terms like "always" and "everlasting" in connection with divine eternity have a non-temporal sense, as they do with Plotinus. (Richard Sorabji, *Time, Creation, and the Continuum* [Ithaca, N. Y. Cornell University Press, 1983], p. 115.)
51. Plato *Timaeus* 37d; 38a. (Jowett trans.) "τὸ δὲ αἰεὶ κατὰ ταῦτα ἔχον ἀκινήτως." The text is Rivaud's.
52. Ibid. 37d. "κατ' ἀριθμὸν ἰούσαν"; "μένοντος αἰώνιος ἐν ἐνί."
53. Sorabji, *Time*, p. 108.
54. Plotinus *Enneads* 3.7.1.1-2; 3.7.4.42-3. (MacKenna trans.) "αἰὼν γὰρ ἀπὸ τοῦ αἰεὶ ὄντος." The text is Henry and Schweizer's in the *Scriptorum Classicorum Bibliotheca Oxoniensis*.
55. Ibid. 3.7.2.31-2. "εἴτα τὸν αἰῶνα οὐ μόνον ἐν στάσει δεῖ νοεῖν, ἀλλὰ καὶ ἐν ἐνί." Cf. ibid. 3.7.6.4-8.
56. Ibid. 3.7.3.19-23. "...οἷον ἐν σημείῳ ὁμοῦ πάντων ὄντων καὶ οὔποτε εἰς ῥύσιν προιόντων, ἀλλὰ μένοντος ἐν τῷ αὐτῷ ἐν αὐτῷ καὶ οὐ μὴ μεταβάλλοντος, ὄντος δ' ἐν τῷ παρόντι αἰεί, ὅτι οὐδὲν αὐτοῦ παρῆλθεν οὐδ' αὐτὸ γενήσεται, ἀλλὰ τοῦτο ὅπερ ἔστι, τοῦτο καὶ ὄντος."

57. Aristotle *Analytica posteriora* 1.10.76b5-6: "...arithmetic studies units and geometry points and lines" ("...μονάδας ἡ ἀριθμητικὴ, ἡ δὲ γεωμετρία σημεῖα καὶ γραμμὰς."), idem *Topica* 6.4.141b6-7, 10, 12-13; "...a point is more intelligible than a line.... To us, however, the converse sometimes happens.... a line more than a point" ("... γνωριμώτερον...στιγμὴ γραμμῆς....ἡμῖν δ' ἀνάπαλιν ἐνίοτε συμβαίνει...γραμμὴ δὲ σημεῖον μᾶλλον."). Note especially the comparison of a mathematical point to an instantaneous "now" in idem *Physics* 8.8.262a 28-31: "...we must note that we cannot with strict propriety say either that the mobile 'has come' to B or that it 'has left' it, but only that it 'is there' at an instantaneous 'now,' and not *in* any space or period of time at all...." ("...οὔτε γεγονέναι οὔτε ἀπογεγονέναι οἶόν τε τὸ Α κατὰ τὸ Β σημεῖον, ἀλλὰ μόνον εἶναι ἐν τῷ νῦν, ἐν χρόνῳ δ' οὐδενὶ πλὴν...."). On points of time see idem *De caelo* 1.12.12-14.
58. Plotinus *Enneads* 3.7.6.21-36.
 "Ὅταν δὲ τὸ αἰεὶ λέγωμεν καὶ τὸ οὐ ποτὲ μὲν ὄν, ποτὲ δὲ μὴ ὄν ἡμῶν, ἔνεκα [τῆς σαφηνείας] δεῖ νομίζειν λέγεσθαι· ἐπεὶ τὸ γε αἰεὶ τάχ' ἂν οὐ κυρίως λέγοιτο, ἀλλὰ ληφθὲν εἰς δῆλωσιν τοῦ ἀφθάρτου πλανῶ ἂν τὴν ψυχὴν εἰς ἔκτασιν τοῦ πλείονος καὶ ἔτι ὥς μὴ ἐπιλείψοντός ποτε. Τὸ δὲ ἴσως βέλτιον ἦν μόνον τὸ "ὦν" λέγειν. Ἀλλὰ ὥσπερ τὸ ὄν ἀρχοῦν ὄνομα τῇ οὐσίᾳ, ἐπειδὴ καὶ τὴν γένεσιν οὐσίαν ἐνόμιζον, ἐνδεήθησαν πρὸς τὸ μαθεῖν καὶ προσθήκης τοῦ αἰεὶ. Οὐ γὰρ ἄλλο μὲν ἐστὶν ὄν, ἄλλο δὲ τὸ αἰεὶ ὄν διὸ ληπτέον τὸ αἰεὶ οἶον "ἀληθῶς ὦν" λέγεσθαι καὶ συναρτεῖον τὸ αἰεὶ εἰς ἀδιάστατον δύναιμι τὴν οὐδὲν δεομένην οὐδενὸς μεθ' ὃ ἥδη ἔχει δὲ τὸ πᾶν.
59. Stump and Kretzmann, "Eternity," p. 431. Note they misquote the title.
60. Plotin, *Über Ewigkeit und Zeit*, trans. with an Introduction and Commentary by Werner Beierwaltes, Klostermann Texte Philosophie (Frankfurt am Main: Vittorio Klostermann, 1967), pp. 41-3.
 "Ewigkeit also ist das in sichselbst im Selben verharrende, das Ganze oder Alles zugleich (weil ohne Vergangenheit und Zukunft) seiende, unwandelbare Leben des Geistes, das "ständig" abstands- oder ausdehnungslos denkend bei sich selbst ist. Diese ewige Selbstgegenwart des Denkens im Sein durch das Leben gleicht dem Punkt, in den Alles zugleich denkend versammelt ist, der jedoch seine unausgedehnte, in sich durch das Denken bewegte und lebende Einheit nicht dadurch aufgibt, dass er "in Fluss aus sich hervorgeht"²⁶....Ewigkeit ist gerade dieses "ständig"-bewegte, alles zugleich in sich wie einen Punkt versammelnde, unausgedehnte, zeitlose JETZT. JETZT ist mit dem "Zeitlos-Gegenwärtig-Sein" identisch. Da Ewigkeit weder durch das WAR, noch durch das WIRD SEIN, das "Früher" oder "Später," das "Zuvor" oder "Demnach" bestimmt ist, bleibt nur noch, dass "sie ist in dem, was Sein ist:"³¹ im IST.... Dieses IST ist immer schon JETZT, indem es die "Fülle" des Seins immer schon denkend ist. Gerade in dieser Benennung der Ewigkeit als IST und JETZT zeigt sich das Sein der Ewigkeit dem menschlichen Denken als Paradoxen: dass Ewigkeit zwar nicht Zeit ist, gleichwohl aber auf Grund der in die Zeitlichkeit verflochtenen Sprache mit Namen benannt werden muss, die ursprünglich zeitlichen Sinn haben. IST und JETZT müssen daher im Bezug auf Ewigkeit als entzeitlich gedacht werden, ähnlich wie im Begriff der Ständigkeit und Bewegung jeweils deren Negation mitzudenken ist, wenn sie das Sein der Ewigkeit zureichend deutlich machen sollen. Insofern ist Ewigkeit ebenso wie der höchste Gedanke der plotinischen Philosophie, das EINE selbst, nur einer negativen Dialektik zugänglich und dies wiederum nur im einen analogen Sinne: als Negation der Zeit, als das der Zeit Unähnliche.
²⁶³, 20 ³¹³, 33 sq.: λείπεται δὲ ἐν τῷ εἶναι τοῦτο ὅπερ ἔστιν εἶναι."
61. Sorabji, *Time*, p. 112.
62. Ibid., p. 114.
63. Boethius *Philosophiae consolations* 5.pr.6.68-9.
64. Sorabji, *Time*, pp. 115-16.
65. Boethius *Philosophiae consolations* 5.pr.6.10-14.
66. On the background of this distinction see Courcelle, "*Consolation*," pp. 221-31; Gruber, *Kommentar*, p. 411. Both trace it to Proclus.

67. Boethius *Philosophiae consolations* 5.pr.6.25-31. (Stump-Kretzmann trans.)

Quod igitur interminabilis uitae plenitudinem totamperiter comprehendit ac possidet, cui neque futuri quidquam absit nec praeteriti fluxerit, id aeternum esse iuere perhibetur, idque necesse est et sui compos praesens sibi semper adistere et infinitatem mobilis temporis habere praesentem.

This notion was central to the Neo-Platonic conception of eternity upon which Boethius drew. Thus, Plotinus writes:

That which neither has been nor will be, but simply possesses being; that which enjoys stable existence as neither in process of change nor having ever changed—that is Eternity. Thus we come to the definition: the Life—instantaneously entire, complete, at no point broken into period or part—which belongs to the Authentic Existent by its very existence, this is the thing we were probing for—this is Eternity. (Plotinus *Enneads* 3.7.3.34-8.)

“Ο οὖν μήτε ἦν, μήτε ἔσται, ἀλλ’ ἔστι μόνον, τοῦτο ἐστὼς ἔχον τὸ εἶναι τῷ μὴ μεταβάλλειν εἰς τὸ ἔσται μὴδ’ αὐ μεταβεβληκέναι ἐστὶν ὁ αἰὼν. Γίνεται τοῖνυν ἡ περὶ τὸ ὄν ἐν τῷ εἶναι ζωῇ ὁμοῦ πάσα καὶ πλήρης ἀδιάστατος πανταχῇ τοῦτο, ὃ δὴ ζητοῦμεν, αἰῶν.

Similarly Proclus:

All that is eternal is a simultaneous whole. If its existence alone be eternal, that existence is simultaneously present in its entirety; there is not one part of it which has already emerged and another which will emerge later, but as yet is not; all that it is capable of being it already possesses in entirety, without diminution and without serial extension. (Proclus *Elements of Theology* F.52. [Dodds trans.].)

πᾶν τὸ αἰώνιον ὅλον ἅμα ἐστίν· εἴτε τὴν οὐσίαν ἔχει μόνον αἰώνιον, ὅλην ἅμα παρούσαν αὐτὴν ἔχον, καὶ οὐ τὸ μὲν αὐτῆς ὑποστὰν ἤδη, τὸ δὲ εἰσαυθὶς ὑποστησομενον, ὃ μὴπω ἔστιν, ἀλλ’ ὅπόσον εἶναι δύναται, τοσοῦτον ὅλον ἤδη κεκτημένον ἀνελαττώτως καὶ ἀνεπιτάτως. (The text is Dodds’s.)

68. Ammonius *In Aristotelis de interpretatione commentarius* 132.8-138.10; for a comparison, see Courcelle, “*Consolation*,” pp. 215-19; Huber, *Göttlicher Vorsehung und menschlicher Freiheit*, pp. 46-52. Although Ammonius sees the solution in God’s timeless knowledge of all contingents, he lacks the conception of eternity as present (*praesentia*); nor does he employ the distinction between simple and conditional necessity, so that his solution remains paradoxical. See also Proclus *On Providence and Fate* 50-2. Origen held to God’s timelessness (*De principiis* 1.2.11; 4.1.28), as did Augustine (*De diversis quaestionibus ad Simplicianum* 2.2.2.27-36; idem *Confessionum* 11.31.41; idem *De diversis quaestionibus octiginta tribus* 17; idem *De trinitate* 4.1.3; 4.18.24; 4.21.30; 5.10-11); but neither employed this doctrine to resolve the problem of fatalism.
69. Boethius *Philosophiae consolations* 5.pr.6.61-6.
...scientia quoque eius omnem temporis supergressa motionem in suae manet simplicitate praesentiae infinitaque praeteriti ac futuri spatia complectens omnia quasi iam gerantur in sua simplici cognitione considerat.
70. Ibid. 5.pr.6.72-163.
71. Boethius *De interpretatione* (ed. secunda) 514A-B.

NOTES TO CHAPTER FOUR

1. Thomas Aquinas *Questiones disputate de veritate* 2.8; idem *Summa contra gentiles* 1.66; idem *Summa Theologiae* 1a.14.9.
2. Aquinas *De veritate* 2.3-5; idem *Summa contra gentiles* 1.49; idem *Summa theologiae* 1a.14.5.
3. Aquinas *Summa contra gentiles* 1.66.4. (All citations of this *summa* will be from the Pegis translation.)
“...deus cognoscit alia a se per suam essentiam in quantum est similitudo eorum quae ab eo procedunt ... sed, cum essentia dei sit infinitae perfectionis ... quaelibet autem alia res habeat esse et perfectionem terminata: impossibile est

quod universitas rerum aliarum adaequet essentiae divinae perfectionem, extendit igitur se vis suae repraesentationis ad multo plura quam ad ea qua sunt. si igitur deus totaliter virtutem et perfectionem essentiae suae cognoscit, extendit se eius cognitio non solum ad ea quae sunt, sed etiam ad ea qua non sunt.” All texts of Thomas’s works other than the *Summa theologiae* are from *S. Thomae Aquinatis Opera Omnia*, 7 vols., ed. Robertus Busa (Stuttgart-Bad Cannstatt: Friedrich Frommann Verlag, 1980).

4. Aquinas *Summa theologiae* 1a.14.9. (All citations of this *summa* are from the Blackfriars edition.)

“Sed horum quae actu non sunt, est attendenda quaedam diversitas. Quedam enim, licet non sint nunc in actu, tamen vel fuerunt vel erunt: et omnia ista dicitur Deus scire scientia *visionis*. Quia, cum intelligere Dei, quod est ejus esse, aeternitate mensuretur, quae sine successione existens totum tempus comprehendit, praesens intuitus Dei fertur in totum tempus, et in omnia quae sunt in quocunque tempore, sicut in subjecta sibi praesentialiter. Quedam vero sunt in potentia Dei vel creaturae, quae tamen nec sunt nec erunt neque fuerunt. Et respectu horum non dicitur habere scientiam visionis, sed *simplicis intelligentiae*.”

The text is also from the Blackfriars’ edition. Cf. also idem *De veritate* 2.9 ad 2.

5. Aquinas *De veritate* 2.9 ad 3.

6. Aquinas *De veritate* 1.5 ad 1, 7, 10.

7. Thomas Aquinas *In libros perihermeneias* 13.9.

8. *Ibid.* 13.11. (All citations of this work are from the Oesterle translation.)

“...quamdiu aliquid est futurum, nondum est in seipso, est tamen aliquid in sua causa: quod quidem contingit tripliciter. uno modo, ut sic sit in sua causa ut ex necessitate ex ea proveniat; et tunc determinate habet esse in sua causa; unde determinate potest dici de eo quod erit. alio modo, aliquid est in sua causa, ut quae habet inclinationem ad suum effectum, quae tamen impediri potest; unde et hoc determinatum est in sua causa, sed mutabiliter; et sic de hoc vere dici potest, hoc erit, sed non per omnimodam certitudinem. tertio, aliquid est in sua causa pure in potentia, quae etiam non magis est determinata ad unum quam ad aliud; unde relinquitur quod nullo modo potest de aliquo eorum determinate dici quod sit futurum, sed quod sit vel non sit.”

9. *Ibid.* 14.19.

“...futurum autem non cognoscit in seipsis, quia nondum sunt, sed cognoscere ea potest in causis suis, per certitudinem quidem, si totaliter in causis suis sint determinata, ut ex quibus de necessitate evenient; per coniecturam autem, si non sint sic determinata quin impediri possint, sicut quae sunt ut in pluribus; nullo autem modo, si in suis causis sunt omnino in potentia non magis determinata ad unum quam ad aliud, sicut quae sunt ad utrumlibet, non enim est aliquid cognoscibile secundum quod est in potentia, sed solum secundum quod est in actu, ut patet per philosophum in *ix* metaphysicae.”

10. Aquinas *De veritate* 2.12 ad 8. “...deus cognoscat ordinem unius ad alterum, et sic cognoscat aliquid esse futurum alteri, sed sic non est inconveniens quod ponatur, quod deus scit aliquid esse futurum quod non erit; in quantum, scilicet, scit aliquas causas esse inclinat ad aliquem effectum, qui non producetur...”

11. *Ibid.* 2.12; cf. 2.12 ad 6. See also Aquinas *Summa theologiae* 1a.86.4.

12. Aquinas *Summa contra gentiles* 1.66.8; cf. idem *Scriptum in IV Libros Sententiarum*.

13. Aquinas *De veritate* 2.8; idem *Summa theologiae* 1a.14.16.

14. Aquinas *De veritate* 2.12 ad 1.

15. *Ibid.* 2.12. ad 9.

16. *Ibid.* 2.12 ad 4; idem *Summa theologiae* 1a.14.13 ad 3.

17. Aquinas *De veritate* 2.12 ad 2.

18. *Ibid.* 2.12 ad 7, 8; idem *Summa theologiae* 1a.14.13 ad 2.

19. Aquinas *Summa theologiae* 1a.14.13.

20. Aquinas *In perihermeneias* 14.21.

“Ex hoc autem quod homo videt socratem sedere, non tollitur eius contingentia

quae respicit ordinem causae ad effectem; tamen certissime et infallibiliter videt oculus hominis socratem sedere dum sedet, quia unumquodque prout est in seipso iam determinatum est.”

21. Aquinas *De veritate* 2.12. Baumer tries to analyze this necessity in terms of David Lewis’s inevitability. A proposition is inevitable at time *t* at a world *i* iff it is true in every world exactly like *i* up to *t*. Aquinas’s solution is that insofar as a thing is actual, its existence is inevitable, but as it exists in its causes it is potential. God knows it as actual and, hence, inevitable. (Michael R. Baumer, “The Role of ‘Inevitability at Time T’ in Aquinas’s Solution to the Problem of Future Contingents,” *New Scholasticism* 53 [1979]: 152-3.) Not only does the concept of inevitability seem out of place with reference to what is present, but Aquinas would hold that a future contingent, though actual for God, is not necessary in the sense that it occurs in all possible worlds with identical histories up to *t*. It is necessary in that it cannot be changed, but it remains contingent in that in other worlds identical up to *t*, it does not always occur.
22. Aquinas *Summa contra gentiles* 1.67.2.
 “Contingens enim certitudini cognitionis non repugnat nisi secundum quod futurum est, non autem secundum quod praesens est. contingens enim, cum futurum est, potest non esse: et sic cognitio aestimantis ipsum futurum esse falli potest; fallitur enim si non erit quod futurum esse aestimavit, ex quo autem praesens est, pro illo tempore non potest non esse: potest autem in futurum non esse, sed hoc non iam pertinet ad contingens prout praesens est, sed prout futurum est, unde nihil certitudini sensus deperit cum quis videt currere hominem, quamvis hoc dictum sit contingens, omnis igitur cognitio quae supra contingens fertur prout praesens est, certa esse potest. divini autem intellectus intuitus ab aeterno fertur unumquodque eorum quae temporis cursu peraguntur prout praesens est.... relinquitur igitur quod de contingentibus nihil prohibet deum ab aeterno scientiam infallibilem habere.”
23. Aquinas *De veritate* 2.12 ad 2.
 “...contingens refertur ad divinam cognitionem secundum quod ponitur esse in rerum natura: ex quo autem est, non potest non esse tunc quando est, quia quod est, necesse est esse quando est, ut in *i* perihermeneias dicitur; non tamen sequitur quod simpliciter sit necessarium, nec quod scientia dei fallatur, sicut et visus meus non fallitur dum video socratem sedere, quamvis hoc sit contingens.”
24. Aquinas *Summa contra gentiles* 1.66.7.
 “quicquid igitur in quacumque parte temporis est, coexistit aeterno quasi praesens eidem: etsi respectu alterius partis temporis sit praeteritum vel futurum. aeterno autem non potest aliquid praesentialiter coexistere nisi toti: quia successionis durationem non habet. quicquid igitur per totum decursum temporis agitur, divinus intellectus in tota sua aeternitate intuetur quasi praesens. nec tamen quod quadam parte temporis agitur, semper fuit existens. relinquitur igitur quod eorum quae secundum decursum temporis nondum sunt, deus notitiam habet.”
25. Anthony Kenny, “Divine Foreknowledge and Human Freedom,” in *Aquinas: a Collection of Critical Essays*, ed. idem, Modern Studies in Philosophy (Garden City, N. Y.: Doubleday, Anchor Books, 1969), p. 264.
26. Aquinas *De veritate* 2.12; idem *In perihermeneias* 14.19; idem *Summa theologiae* 1a.14.13 ad 3; idem *Compendium theologiae* 133.
27. Aquinas *In perihermeneias* 14.20. “Sed deus est omnino extra ordinem temporis, quasi in arce aeternitatis constitutus, quae est tota simul, cui subiacet totus temporis decursus secundum unum et simplicem eius intuitum....”
28. Aquinas *De veritate* 2.12.
 “unde, cum visio divinae scientiae aeternitate mensuretur, quae est tota simul, et tamen totum tempus includit, nec alicui parti temporis deest, sequitur ut quicquid in tempore geritur, non ut futurum, sed ut praesens videat: hoc enim quod est a deo visum est quidem futurum rei alteri, cui succedit in tempore; sed ipsae divinae visioni, quae non (est) in tempore, sed extra tempus, non est futurum,

- sed praesens. ita ergo nos videmus futurum ut futurum, quia visioni nostrae futurum est, cum tempore nostra visio mensuretur; sed divinae visioni, quae est extra tempus, futurum non est.”
29. Kenny, “Divine Foreknowledge,” pp. 262-3.
 30. Arthur N. Prior, “The Formalities of Omniscience,” in idem, *Papers on Time and Tense* (Oxford: Clarendon Press, 1968), p. 29; Kenny, “Divine Foreknowledge,” pp. 263-4.
 31. Aquinas *De veritate* 2.12 ad 1. “...licet contingens non sit determinatum quamdiu futurum est, tamen ex quo productum est in rerum natura, veritatem determinatam habet; et hoc modo super illud fertur intuitus divinae cognitionis.”
 32. Aquinas *In perihermeneias* 13.6.
 33. Ibid. 13.10.
 34. Ibid. 13.12.
 35. Ibid. 15.3-4.
 36. Ibid. 15.5.
 “...dicit manifestum esse ex praedictis quod non est necesse in omni genere affirmationum et negationum oppositarum, alteram determinate esse veram et alteram esse falsam: quia non eodem modo se habet veritas et falsitas in his quae sunt iam de praesenti et in his quae non sunt, sed possunt esse vel non esse.... in his quae sunt necesse est determinate alterum esse verum et alterum falsum: quod non contingit in futuris quae possunt esse et non esse.”
 37. Aquinas *De veritate* 1.1. “Convenientiam vero entis ad intellectum exprimit hoc nomen verum.” “adaequatio intellectus et rei.”
 38. Ibid. 1.2 ad 1. “...verum per prius dicitur de intellectu vero, et per posterius de re sibi adaequata.”
 39. Ibid. 1.3.
 40. Ibid. 1.5.
 “in hac autem adaequatione vel commensuratione intellectus ac rei non requiritur quod utrumque extremorum sit in actu. intellectus enim noster potest nunc adaequari his quae in futurum erunt, nunc autem non sunt; aliter non esset haec vera: antichristus nascetur; unde hoc denominatur verum a veritate quae est in intellectu tantum, etiam quando non est res ipsa.” Cf. ibid. 1.5 ad 11.
 41. Anthony Kenny, *The God of the Philosophers* (Oxford: Clarendon Press, 1979), pp. 54-5.
 42. Aquinas *De veritate* 2.12 ad 6. “...sicut scientia nostra non potest esse de futuris contingentibus, ita nec scientia dei; et adhuc multo minus, si ea ut future cognosceret; cognoscit autem ea ut praesentia sibi, aliis autem futura....” (The Mulligan translation has “science” for the first “scientia.”)
 43. See R. D. Bradley, “Must the Future Be What it is Going to Be?” *Mind* 68 (1959): 143-208; William Kneale and Martha Kneale, *The Development of Logic* (Oxford: Clarendon Press, 1978), p. 51; G. H. von Wright, “Time, Truth and Necessity,” in *Intention and Intentionality*, ed. Cora Diamond and Jenny Teichman (Brighton, England: Harvester Press, 1979), p. 241; cf. Thomas Bradley Talbott, “Fatalism and the Timelessness of Truth” (Ph.D. dissertation, University of California at Santa Barbara, 1974), pp. 167-79.
 44. Aquinas *Summa theologiae* 1a.14.15 ad 3.
 45. Aquinas *De veritate* 2.12 ad 8. “...quamvis contingens, dum est futurum, non habeat esse, tamen ex quo est praesens, esse habet et veritatem; et sic divinae visioni substat....”
 46. Ibid. 1.5 ad 2. “res ergo quae est aliquid positive extra animam, habet aliquid in se unde vera dici possit. non autem non esse rei, sed quicquid veritatis ei attribuitur est ex parte intellectus.”
 47. Ibid. 1.5 ad 6. “...illud quod est futurum, in quantum est futurum, non est, et similiter quod est praeteritum, in quantum huiusmodi, unde eadem ratio est de veritate praeteriti et futuri, sicut et de veritate non entis....”
 48. Ibid. 2.12 ad 4; idem *Summa theologiae* 1a.14.13 ad 3. The distinction is equivalent

in medieval terminology to the distinction between necessity *in sensu composito* and *in sensu diviso*. The composite sense of necessity was *de dicto*; the divided sense referred to necessity *de re*. See Kenny, "Divine Foreknowledge," pp. 258-9. In contemporary logical theory the distinction rests on the order of the quantifier and the intensional operator: $\Box (x) (F x)$ is *de dicto* necessity, while $(x) \Box (F x)$ is *de re* necessity. *De re* necessity requires that one quantify over the modal operator, while *de dicto* necessity requires that the modal operator govern the entire quantified expression. See Alvin Plantinga, *The Nature of Necessity* (Oxford: Clarendon Press, 1974), pp. 9-13.

49. Aquinas *Summa contra gentiles* 1.67.10.

50. Aquinas *De veritate* 2.12 ad 2.

51. Ibid. *De veritate* 2.12 ad 7; idem *Summa contra gentiles* 1.67.9; idem *Summa theologiae* 1a.14.13 ad 2. For a critical discussion see Prior, "Formalities of Omniscience," pp. 31-44; Kenny, "Divine Foreknowledge," pp. 259-69; idem, *God of the Philosophers*, pp. 55-6.

52. See Bonaventure *I Sententiarum* 38.2.2; Albertus Magnus *I Sententiarum* 38.4.

53. Aquinas *De veritate* 2.12 ad 7.

"sed hoc nihil est: quia cum dicitur: hoc est futurum, vel fuit futurum; designatur ordo qui est in causis illius rei ad productionem eius. quamvis autem causae quae sunt ordinatae ad aliquem effectum possint impediri, ut effectus non consequatur ex eis, non tamen potest impediri quin fuerint aliquando ad hoc ordinatae; unde, licet quod est futurum, possit non esse futurum, nunquam tamen potest non fuisse futurum."

54. Aquinas *Summa theologiae* 1a.14.13 ad 2: "non tollit ei necessitatem; quia id quod habuit respectum ad futurum, necesse est habuisse, licet etiam futurum non sequatur quandoque."

55. See Robert Grosseteste *De libero arbitrio* 6.

56. Prior interprets Aquinas to mean that the necessity of a proposition does not depend on its component, but on the main "link," which, though correct here, is not always true; e.g., a conjunction. (Prior, "Formalities of Omniscience," p. 34.) But Prior seems to have overlooked the propositional attitude terms which indicate that such contexts were Aquinas's focus of concern. Prior also associates Occamist views with this solution, but they would seem to follow more closely the first solution.

57. Aquinas *De veritate* 2.12 ad 7. "unde eadem ratio necessitatis et contingentiae est in utraque istarum: ego cogito hominem esse animal; et: ego cogito socratem currere."

58. Alexander of Hales *Summa theologiae* 1.171.184.

59. Aquinas *De veritate* 2.12 ad 7. "...hoc non est propter naturam causae et causati quod ex antecedente necessario sequitur consequens necessarium, sed magis propter ordinem consequentis ad antecedens."

60. In *De veritate* 2.12 ad 7 he asserts that the consequent is absolutely necessary in the way in which it follows from the antecedent; but in *Summa theologiae* 1a.14.13 ad 2 he says it has the same necessity as the antecedent.

61. Iseminger calls Aquinas's response unsuccessful because there can be no difference between a proposition as thought of and a proposition in itself. And even if there were, if the proposition as the object of God's thought were true at t_1 then the proposition in itself must be true at t_1 . (Gary Iseminger, "Foreknowledge and Necessity: *Summa Theologiae* 1a.14, 13 ad 2," *Midwest Studies in Philosophy* 1 [1976]:9-10.) But Iseminger is importing modern notions into Aquinas. Thomas was not talking about propositions as the objects of God's knowledge, but things. God's knowledge is in fact non-propositional. Aquinas simply wants to underscore that God knows things as they are present to Him, not future. Aquinas did not even accept the existence of such an abstract object as a "proposition in itself."

62. Aquinas *Summa contra gentiles* 1.67.9. "...quia quod iam est, non potest, quantum ad illum instans, non esse."

63. Aquinas *Summa theologiae* 1a.14.13 ad 2.

64. Aquinas *Summa contra gentiles* 1.67.3, 9.

"contingens enim sic in sua causa est ut non esse ex ea possit et esse; necessarium vero non potest ex sua causa nisi esse. secundum id vero quod utrumque eorum in se est, non differt quantum ad esse, supra quod fundatur verum: quia in contingenti, secundum id quod in se est, non est esse et non esse, sed solum esse, licet in futurum contingens possit non esse....

...non est dicere hoc esse cognitum quasi non existens, ut locum habeat quaestio qua quaeritur an possit non esse: sed sic cognitum dicitur a deo ut iam in sua existentia visum, quo posito, non remanet praedictae quaestioni locus: quia quod iam est, non potest, quantum ad illud instans, non esse."

65. Ibid. 1.66.8. "non enim deus rerum quae apud nos nondum sunt, videt solum esse quod habent in suis causis, sed etiam illud quod habent in seipsis, inquantum eius aeternitas est praesens sua indivisibilitate omni tempori."

66. Aquinas *Summa theologiae* 1a.14.13.

"Deus...cognoscit omnia contingentia, non solum prout sunt in suis causis, sed etiam prout unumquodque eorum est actu in seipso.

Et licet contingentia fiant in actu successive, non tamen Deus successive cognoscit contingentia prout sunt in suo esse, sicut nos, sed simul quia sua cognitio mensuratur aeternitate, sicut etiam suum esse; aeternitas autem tota simul existens ambit totum tempus.... Unde omnia quae sunt in tempore, sunt Deo ab aeterno praesentia, non solum ea ratione qua habet rationes rerum apud se praesentes, ut quidam dicunt; sed quia ejus intuitus fertur super omnia ab aeterno, prout sunt in sua praesentialitate."

67. Cf. Aquinas *Summa contra gentiles* 1.66.7; idem *De veritate* 2.3. ad 12.

68. Aquinas *Compendium theologiae* 133.

"....quia etiam antequam fiant, intuetur ea prout sunt actu in suo esse, et non solum prout sunt futura et virtute in suis causis, sicut nos aliqua futura cognoscere possumus. contingentia autem licet prout sunt in suis causis virtute futura existentia, non sunt determinata ad unum, ut de eis certa cognito haberi possit, tamen prout sunt actu in suo esse, iam sunt determinata ad unum, et potest de eis certa haberi cognitio.... nam aeternitas sua praesentialiter totum temporis decursum attingit, et ultra transcendit, ut sic consideremus deum in sua aeternitate fluxum temporis cognoscere, sicut qui in altitudine speculae constitutus totum transitum viatorum simul intuetur."

69. Aquinas *Summa contra gentiles* 2.35; idem *Summa theologiae* 1a.10.1 ad 5; 1a.10.4 ad 2; 1a.14.13.

70. Prior's difficulties in understanding Thomas's view stem from the fact that he attributes to Aquinas a dynamical theory of time. Hence, Prior muses that he cannot understand what is meant by saying that future contingent events are neither future nor contingent as God sees them. In fact, he wonders, how could God know a state of affairs to be present and beyond alteration until it is? If God sees the state of affairs as present when it is not, then He is mistaken. (Prior, "Formalities of Omniscience," pp. 43-4.) But on a "block" view of time, such difficulties disappear. Prior would no doubt say that the "block" view of time itself makes no sense, and in this he may well be right.

71. Aquinas *De veritate* 2.1-5; idem *Summa contra gentiles* 1.44-50; idem *Summa theologiae* 1a.14.1-5. See also Gilson, *Philosophy of Thomas Aquinas*, pp. 115-16.

72. Aquinas *De veritate* 3; idem *Summa contra gentiles* 1.51-4, idem *Summa theologiae* 1a.15. For a good account see Frederick Copleston, *A History of Philosophy*, vol. 2: *Mediaeval Philosophy: Augustine to Scotus* (Westminster, Maryland: Newman Press, 1950), pp. 358-60.

73. Aquinas *Summa contra gentiles* 2.35. This chapter is very instructive, for Aquinas seems to presuppose a dynamical view of time, but in fact his arguments only serve to prove that the universe has not existed sempiternally. If we eliminate the equivocation on "eternity," what Thomas succeeds in showing is only that God's timeless action need not cause an everlasting effect.

74. Aquinas *De veritate* 2.14; idem *Summa contra gentiles* 1.61.7; idem *Summa theologiae* 1a.14.8.

75. Origen *On Romans VII*, cited in Aquinas *Summa theologiae* 1a.14.8. "Non propterea aliquid erit quia id scit Deus futurum; sed quia futurum est, ideo scitur a Deo antequam fiat."
76. Aquinas *Summa contra gentiles* 1.61.7.
 "...scientia intellectus humani a rebus quodammodo causatur: unde provenit quod scibilia sunt mensura scientiae humanae; ex hoc enim verum est quod intellectu diiudicatur, quia res ita se habet, et non e converso, intellectus autem divinus per suam scientiam est causa rerum, inde oportet quod scientia eius sit mensura rerum.... talis igitur est comparatio intellectus divini ad res qualis rerum ad intellectum humanum."
- Cf. *ibid.* 1.66.2.
77. Aquinas *In perihermenias* 14.3.
78. Aquinas *De veritate* 2.14.
 "...vel scientia sit causa sciti, vel scitum sit causa scientiae, vel utrumque ab una causa causetur. non potest autem dici quod res scitae a deo sint causae scientiae in eo; quia res sunt temporales, et scientia dei est aeterna, temporale autem non potest esse causa aeterni. similiter non potest dici quod utrumque ab una causa causetur; quia in deo nihil potest esse causatum, cum ipse sit quicquid habet. unde relinquitur quod scientia eius sit causa rerum."
79. Aquinas *Summa theologiae* 1a.14.8 *ad* 1.
 "sed quod dicit ideo praescire Deum aliqua quia futura sunt, intelligendum est secundum causam consequentiae, et non secundum causam essendi. Sequitur enim, si aliqua sunt futura, quod Deus ea praescierit; non tamen res futurae sunt causa quod Deus sciat."
80. Aquinas *De veritate* 1.1; *Summa theologiae* 1a.16.2.
81. Aquinas *Summa theologiae* 1a.16.7.
82. *Ibid.* 1a.14.14; *idem De veritate* 1.5 *ad* 10.
83. Aquinas *Summa theologiae* 1a.14.8.
 "...forma intelligibilis non nominat principium actionis secundum quod est tantum in intelligente, nisi adiungatur ei incinatio ad effectum. quae est per voluntatem. Cum enim forma intelligibilis ad opposita se habeat (cum sit eadem scientia appositorum).... Manifestum est autem quod Deus per suum intellectum causat res, cum suum esse sit suum intelligere. Unde necesse est quod sua scientia sit causa rerum, secundum quod habet voluntatem conjunctam. Unde scientia Dei, secundum quod est causa rerum, consuevit nominari *scientia approbationis*."
- Cf. *idem De veritate* 2.14.
84. Aquinas *Summa contra gentiles* 1.68.
85. *Ibid.* 3.2.89.
86. *Ibid.* 3.2.89.5-6. "deus igitur est causa nobis non solum voluntatis, ed etiam volendi.... omnis motus voluntatis a prima voluntate causetur, quae est voluntas dei."
87. *Ibid.* 3.2.91.2. "...electiones et voluntatum motus immediate a deo disponuntur...."
88. Aquinas *De veritate* 2.14.
 "Hence, between His knowledge (the cause of the thing) and the thing caused there is found a two-fold medium: one on the part of God, namely, the divine will; another on the part of the things themselves in regard to certain effects, namely, the medium of secondary causes through whose mediation things proceed from God's knowledge.... Hence, the things known by God proceed from His knowledge as conditioned by His will and as conditioned by secondary causes. Consequently, it is not necessary that these things follow the manner of His knowledge in all respects."
 "... unde inter scientiam dei, quae est causa rei, et ipsam rem causatam invenitur duplex medium: unum ex parte dei, scilicet divina voluntas; aliud ex parte ipsarum rerum quantum ad quosdam effectus, scilicet causae secundae, quibus mediantibus proveniunt res a scientia dei.... et ideo res scitae a deo proce-

dunt ab eius scientia per modum voluntatis, et per modum causarum secundarum; nec oportet quod in omnibus modum scientiae sequantur.”

89. Aquinas *Summa contra gentiles* 1.85.5-6; cf. 1.83. *Necessitas suppositionis* is the volitional analogy of *necessitas consequentiae*; it is a conditional necessity.
90. Ibid. 1.85.2-4.
91. Ibid. 1.67.6.
92. Joyce agrees and attempts to escape the determinism of the Dominican theory of God's pre-motion of the human will by means of the Jesuit conception of *scientia media*, whereby God knows the truth-value of all counterfactuals concerning possibles prior to His instantiation of the ones He selects (George Hayward Joyce, *Principles of Natural Theology*, Stonyhurst Philosophical Series [London: Longmans, Green, & Co., 1923], pp. 353-71.) This issue we shall take up in chaps. 7 and 8.

NOTES TO CHAPTER FIVE

1. Cf. his parallel discussions in his *Reportata parisiensia* 1.38-40 and his *Reportatio maior* 1.38-40. All these are commentaries on Lombard's *Sentences*; an *ordinatio* was the author's own revised lectures, while a *reportatio* was a student's report of the lectures. This section, however, was not redacted by Scotus and is therefore included in the appendix of the critical edition of the *Ordinatio*. All citations of the *Ordinatio* are from an unpublished translation by Marilyn Adams. The Latin text is found in Joannes Duns Scotus, *Opera omnia*, ed. Carolus Balic (Civitas Vaticana: Typus Polyglottis Vaticanus, 1950-63). References will include the appropriate section numbers followed in parentheses by the volume, page, and line numbers of the critical edition.
2. John Duns Scotus *Ordinatio* 1.38-39.7 (6.406). For an account of Scotus's views on the divine ideas, see Frederick Copleston, *A History of Philosophy*, vol. 2: *Mediaeval Philosophy: Augustine to Scotus* (Westminster, Md.: Newman Press, 1950), pp. 529-30; Etienne Gilson, *Jean Duns Scot* (Paris: Librairie Philosophique J. Vrin, 1952), pp. 279-306, 309-10.
3. Scotus *Ordinatio* 1.38-39.7 (6.406.20). “prima et immediata.”
4. What better argument for S5 could be imagined than that it characterizes the knowledge of God Himself!
5. Herrmann Schwamm, *Das göttliche Vorherwissen bei Duns Scotus u. seinen ersten Anhängern*, Philosophie und Grenzwissenschaft 5 (Innsbruck, Austria; Felizian Rauch, 1934), p. 9.
6. Richard Middleton *I Sententiarum* 39.1.1
7. Scotus *Ordinatio* 1.38-39.8 (6.408.14-18).
“...si totum tempus posset esse simul extra, ‘nunc’ aeternitatis esset simul praesens toti tempori; sed licet tempori repugnet—propter eius successionem—simul esse, nihil propter hoc perfectionis tollitur aeternitati; ergo ipsa aeternitas modo est aequae praesens toti tempori et cuilibet existenti in tempore.”
8. Ibid. 1.38-39.34 (6.441.6-9). “...concedo quod immensitas est praesens omni loco, sed non omni loco actuali et potentiali..., et ita nec aeternitas propter suam infinitatem erit praesens alicui tempori non existenti.”
9. This is developed into a separate argument in the *Reportatio maior* 1.38.
10. Ibid. 1.38-39.34 (6.441-3). (There are two sections numbered 34 and 35.)
11. Ibid. 1.38-39.9-10 (6.409-11).
12. Harris's discussion of Scotus's view of time does not take account of these texts and is therefore very misleading. (C. R. S. Harris, *Duns Scotus*, 2 vols. [New York: Humanities Press, 1959], 2:129-44.) Harris makes Scotus sound like a defender of the thesis of the mind-dependence of becoming, which he clearly is not. Still, as Harris points out, Scotus did not equate God's eternity with aeternity. Duns differentiated between time, aeternity, and eternity. (Scotus *De rerum principio* 22.7.) Time has a beginning and end and is made up of parts or “now's” which

are not co-existent. Aeviternity has a beginning and can cease to be and is the non-successive duration of the substantial being of creatures which, though changing accidentally in time (e.g., the heavenly bodies or angels), do not undergo substantial change. Eternity has essentially neither beginning nor end and is *tota simul*, not in the sense of co-existing with all moments of time at once, but in the sense that there is neither substantial nor accidental change. It seems, however, that aeviternity inevitably collapses into time on this account, since the beings themselves undergo accidental changes, and that eternity becomes indistinguishable from aeviternity, or everlasting and immutable duration, since God's "now" co-exists only with the actual temporal "now" and therefore is related to things as past and future.

13. Scotus *Ordinatio* 1.38-39.10 (6.411.4). "vilesceret."
14. Ibid., 1.38-39.34 (6.443.4-7). "...ex qua non sequitur coexistentia quae dicit relationem ad alterum, nisi haberetur aliquid in altero extremo quod posset esse terminus coexistentiae cum isto fundamento; et tale non potest esse non-ens, quale est omne tempus praeter praesens."
15. Philotheus Boehner, "Problems connected with the 'Tractatus,' " in *The "Tractatus de praedestinatione et de praescientia Dei et de futuris contingentibus" of William Ockham*, ed. P. Boehner, Franciscan Institute Publications 2 (St. Bonaventure, N.Y.: The Franciscan Institute, 1945), p. 53.
16. Scotus *Ordinatio* 1.38-39.35 (6.443). The following account differs sharply from the very recent exposition of Douglas C. Langston, *God's Willing Knowledge* (London: Pennsylvania State University Press, 1986), pp. 16-24. "At the risk of historical inaccuracy," Langston interprets the difference between Aquinas and Scotus to be that Aquinas held that God directly determines only those contingents which in no way are or essentially depend upon the actions of free agents; these He foreknows by knowledge of His will. But contingents which are or depend on the actions of free agents He does not directly determine and so knows them only by *scientia visionis*. By contrast, Scotus held that all contingents are directly willed and thus foreknown by God. But clearly this is historically inaccurate, for it gives insufficient weight to Thomas's doctrine of *scientia approbationis* and to his insistence that God's will determines the motions of the finite will. Langston also misconstrues Scotus's differing views of time and eternity, discussed in the foregoing section, which are central to the disagreement between Aquinas and Scotus.
17. Ibid. 1.2.1 (2.176-7). (Wolter trans.) "...ergo si prima necessario movet, quaelibet alia necessario movetur et quidlibet necessario causatur. Igitur, si aliqua causa secunda contingenter movet, et prima contingenter movebit, quia non causat causa secunda nisi in virtute primae causae, in quantum movetur ab ipsa." Cf. ibid. 1.38.12 (6.412-13).
18. Ibid. 1.38-39.12 (6.412-18-413). "Tota ergo ordinatio causarum, usque ad ultimum effectum, necessario producet si habitudo primae causae ad sibi proximam causam sit necessaria."
19. Ibid. 1.38-39.13 (6.415).
20. Ibid. 1.38-39.14 (6.415-16).
21. Ibid. 1.38-39.15-20 (6.417-25). Such an omission might seem unwise in light of Langston's remarkable claim that Scotus was not, in fact, a libertarian, but held to a compatibilist view according to which an agent *S* is free with respect to action *x* if (i) the agent has the ability to perform *x* and the ability to refrain from performing *x*, and (ii) the agent wills the performance (or the refraining from the performance) of *x* in accordance with his nature. According to Langston (i) does not entail counter-causal freedom, but refers to ability only in the sense of training, know-how, strength, etc. which is present even when circumstances preclude the exercise of that ability. Condition (ii) implies that only a being of a superior nature can determine a free being of a lower nature. In support, Langston points to texts in which Scotus affirms the freedom of the beatified to fall away though they are prevented by God from exercising that freedom and to texts in which Scotus states that a metaphysically superior being can determine an inferior being without infringing on

- its freedom. Langston's exegesis, however, raises a fundamental hermeneutical question about using incidental and less perspicuous texts to reinterpret the principal and clearest texts. Of course, Scotus wants to maintain that God's will determines contingencies related to free agents; but it is not clear that this is not simply inconsistent with his teaching on the freedom of the will rather than its being clear that he is not a libertarian. For more on Scotus's views on freedom see Copleston, *Augustine to Scotus*, pp. 538-41; Etienne Gilson, *History of Christian Philosophy in the Middle Ages* (New York: Random House, 1955), pp. 463-4; Bernardine M. Bonansea, "Duns Scotus' Voluntarism," in *John Duns Scotus, 1265-1965*, ed. John K. Ryan and Bernardine M. Bonansea, *Studies in Philosophy and the History of Philosophy* 3 (Washington, D.C.: Catholic University of America Press, 1965), pp. 83-121; Lawrence Roberts, "John Duns Scotus and the Concept of Human Freedom," (Ph.D. dissertation, Indiana University, 1969), pp. 38-107.
22. Scotus *Ordinatio* 1.38-39.21 (6.426.6-9). "...libertas illa quae est ...ad opposita objecta, ita quod sicut voluntas nostra potest diversis volitionibus tendere in diversa volita, ita illa voluntas potest unica volitione simplici illiminata tendere in quaecumque volita...."
 23. See Copleston, *Augustine to Scotus*, pp. 530-2; Gilson, *History*, pp. 459-61.
 24. Henry of Ghent *Quodlibeta* 8.2.c., f. 301 H-I.
 25. Scotus *Ordinatio* 1.38-39.23 (6.428.12-429.5).
 "...et hoc naturaliter (quantum est ex parte essentiae), ita quod sicut naturaliter intellegit omnia principia necessaria quasi ante actum voluntatis divinae (quia eorum veritas non dependet ab illo actu et essent cognita ab intellectu divino si per impossibile non esset volens), ita essentia divina est ratio cognoscendi ea in illo priore, quia tunc sunt vera; non quidem quod illa vera moveant intellectum divinum—nec etiam termini eorum—ad apprehendendum talem veritatem (quia tunc intellectus divinus vilesceret, quia pateretur ab alio ab essentia sua), sed essentia divina est ratio cognoscendi sicut simplicia ita et complexa talia: tunc autem non sunt vera contingentia, quia nihil est tunc per quod habeant determinatam veritatem; posita autem determinatione voluntatis divinae, iam sunt vera in illo secundo instanti, et idem erit ratio intellectui divino—quod et in primo—intelligendi ista quae iam sunt vera in secundo instanti et fuissent cognita in primo, si tunc fuissent in primo instanti."
 26. Schwamm, *Vorherwissen*, pp. 33-4, 81-4.
 27. Wolfhart Pannenberg, *Die Prädestinationslehre des Duns Scotus*, *Forschungen zur Kirchen- und Dogmengeschichte* 4 (Göttingen: Vandenhoeck & Ruprecht, 1954), pp. 24-7, 131-2.
 28. *Ibid.*, pp. 24-5.
 29. Scotus *Ordinatio* 1.38-39.2 (6.402.4-14).
 30. *Ibid.* 1.38-39.26 (6.432.1-6). "In praesentibus quidem et praeteritis est veritas determinata, ita quod alterum extremum est positum,—et ut intelligitur positum, non est in potestate causae ut ponatur vel non ponatur.... Talis autem non est determinatio ex parte futuri...." Cf. *idem Reportatio maior* 1.38.
 31. *Ibid.* (6.432.8-9). "...non tamen ita quin in potestate causae est pro illo instanti ponere oppositum."
 32. *Ibid.* 1.38-39.3 (6.402-3).
 33. *Ibid.* 1.38-39.27 (6.434.11-12). "...quia si intellectus meus semper sequeretur mutationem in re, ita quod te sedente opinarer te sedere et te surgente opinarer te surgere, non possem decipi...."
 34. *Ibid.* 1.38-39.5 (6.404).
 35. *Ibid.* 1.38-39.31 (6.438.14-18). "...quia immutabilitas non privat nisi possibilem successionem oppositi ad oppositum; necessitas autem simpliciter, privat absolute possibilitatem huius oppositi, et non successionem oppositi ad hoc,—et non sequitur 'oppositum non potest succedere opposito, ergo oppositum non potest inesse.'"
 36. *Ibid.* 1.38-39.6 (6.404-5).
 37. *Ibid.* 1.38-39.6 (6.404-5). "distrahitur."

38. Ibid. 1.38-39.33 (6.440.13-15). "Illa mixtio non valet nisi illa minor sit de inesse simpliciter, et hoc non tantum quod sit vera pro omni tempore, sed quod sit necessario vera."

NOTES TO CHAPTER SIX

1. For an illuminating discussion of Ockham's theory of time and eternity compared with the views of Aristotle and Plato, see Marilyn McCord Adams, "The Problem of God's Foreknowledge and Free Will in Boethius and William Ockham" (Ph.D. dissertation, Cornell University, 1967), pp. 131-67. She argues that for Aristotle immutable beings are not *in* time because they are not bounded by time; rather they exist *with* time, i.e., always or at all times. Hence, the first Unmoved Mover is eternal in precisely the same sense as is the motion of the outermost sphere. Similarly, Ockham holds that God exists throughout all past, present, and future time. He cannot have a past, a present, or a future without also having both the others. The divine duration is measured by the whole of time, actual and potential. Adams's helpful discussion is marred somewhat by two flaws that should be pointed out: (1) She confuses generation/corruption with creation/annihilation. This leads her to misinterpret Ockham as holding that angels are not eternal because they are generable and corruptible. Rather he maintains that because they can be created or annihilated by God, they do not in having either a past, a present, or a future necessarily have both the others as well. The actuality/potentiality of which he speaks refers to time, not the angel's susceptibility to generation and corruption. (2) Adams takes insufficient cognizance of Ockham's commitment to *creatio ex nihilo*. The reason he does not refer to angels as eternal even in the sense of "perpetual" is because, though not generable or corruptible, they were in fact created. They are therefore not everlasting like God. Nevertheless, they do endure throughout all time, since time itself had a beginning, and hence, they cannot be said to be *in* time in the Aristotelian sense, but rather *with* time. An angel cannot endure without some succession of events, but God can exist without any succession whatsoever. Now since Ockham agrees that time is the number of motion, it would seem to follow that the immutable God existing without a series of succession would be timeless. Since, according to the Faith, God did so exist prior to creation, Ockham should hold, it seems, that God is timeless apart from creation and with creation is everlasting throughout all time. But Ockham may hold that when God existed alone, time potentially existed, since a succession of events could have been created from eternity, and so God's duration is measured by this potential time as well as by the actual time arising with creation. No angel possesses this sort of eternity. Since I wrote this chapter, it has come to my attention that Adams has a magisterial work on Ockham forthcoming with University of Notre Dame Press projected at about 1300 pages. Unfortunately, this was not available to me sufficiently in advance to take adequate cognizance of it.
2. William Ockham *Tractatus de praedestinatione et de praescientia dei respectu futurorum contingentium* 2.1.A.7-17. In citations from this work, the initial numerals refer to the appropriate questions and articles of the *Treatise*, the letter to the page portion as divided by Boehner in the 1945 edition of the text and followed in the Adams-Kretzmann translation, and the final numerals to the lines in the more recent Franciscan Institute edition of the text in vol. 2 of Ockham's *Opera philosophica*. References to other works follow a similar pattern.
3. Ibid. 2.1.B.20-3. (All citations of Ockham's works are based on the Adams-Kretzmann translations.) "...Deus habet notitiam determinatam respectu futurorum contingentium, quia determinate scit quae pars contradictionis erit vera et quae falsa." Two mss. read *est* for *erit*. Ockham makes it clear in his replies and elsewhere that future contingent propositions are now determinately true or false. Cf. Ockham *Tractatus* 1.P. 239-45, 289-96.; idem *Ordinatio* 1.38.L-P. [Opinio

propria auctoris]; idem *Expositio super 1^m librum perihermeneias* 1.6.15.7-17 [9.19a39-19b4]; idem *Summa logicae* 3.3.32.63-9, 103-5.

4. Ockham *Summa logicae* 3.3.32.54-69.

“Nam Aristoteles ponit quod nulla propositio contingens talis de futuro est vera vel falsa, ita quod secundum intentionem Aristotelis una pars contradictionis in talibus non est magis vera quam alia. Et propter hoc... una pars contradictionis non est magis scita a quocumque intellectu quam alia, quia quod non est magis verum, non est magis scibile. Et propter hoc Aristoteles non posuisset aliquod futurum contingens esse scitum a Deo, cum nullum tale secundum eum, sit verum, et nihil est scitum nisi verum.

Sed veritas fidei ponit quod futura contingentia sunt scita a Deo, ita quod una pars contradictionis est scita a Deo et alia non est scita a Deo. Sicut Deus ab aeterno scivit istam ‘Beata Virgo est salvanda’ et numquam scivit istam ‘Beata Virgo non est salvanda.’ ... Et propter hoc una pars contradictionis est scita et non alia; ideo una pars est vera, puta illa quae est scita, et alia non est vera, quia non est scita a Deo.”

5. So Philotheus Boehner, “Problems Connected with the Tractatus,” in *The “Tractatus de praedestinatione et de praescientia Dei et de futuris contingentibus” of William Ockham*, ed. P. Boehner, Franciscan Institute Publications 2 (St. Bonaventure, N.Y.: Franciscan Institute, 1945), pp. 48.
6. See Ockham *Summa logicae* 2.7; also Alfred J. Freddoso, “Ockham’s Theory of Truth Conditions,” in William Ockham, *Ockham’s Theory of Propositions: Part II of the “Summa logicae,”* trans. Alfred J. Freddoso and Henry Schuurman, with an Introduction by Alfred J. Freddoso (Notre Dame: University of Notre Dame Press, 1980), pp. 29-40.
7. Alfred J. Freddoso, “Accidental Necessity and Logical Determinism,” *Journal of Philosophy* 80 (1983):265.
8. See Ockham’s remarks in *Ordinatio* 1.38.E [Contra opinionem Scoti], N. [Opinio propria auctoris]; idem *Summa logicae* 3.3.32.116-26; idem *Tractatus* 1.C.59-74; 1.G.139-42, 146-8.

9. See discussion in Marilyn Adams and Norman Kretzmann, “Introduction,” in William Ockham, *Predestination, God’s Foreknowledge, and Future Contingents*, trans. with an Introduction, Notes, and Appendices by M. Mc. Adams and N. Kretzmann, Century Philosophy Sourcebooks (New York: Appleton-Century-Crofts, 1969), pp. 14-16; *ibid.*, 2d ed. (Indianapolis: Hackett Publishing, 1983), pp. 10-11. Adams’s interpretation of Ockham changed radically between the first and second editions of this translation, and the reader will profit from comparing the two Introductions. In the first edition, which reflects more closely the views of her doctoral dissertation, she explains,

“The Aristotelian definition of a determinate thing, whether past or present or future, may be generalized in the claim that

x ’s being A at t_m is determinate at t_n just in case it is settled by something actual in the past or present relative to t_n that x is (was, will be) A at t_m .

Ockham’s definition, by contrast, is generalizable in the claim that

x ’s being A at t_m is determinate at t_n just in case it is settled by something actual at some time or times that x is (was, will be) A at t_m .

The two definitions yield indistinguishable results in the cases of past or present determinate things. But in the crucial case of future determinate things Ockham’s definition stipulates that for a thing that is future relative to t_n to be determinate at t_n , it must be settled not by what is actual in the past or present relative to t_n but rather by what is actual at *some* time or times—whether past, present, or *future* relative to t_n . On this definition a future contingent is a determinate thing.” (*Ibid.*, p. 14.)

Her definitions are confusing because one naturally assumes that t_n comes after t_m , which is not what is intended. Ordinal subscripts ought to be replaced by symbols like t and t^* . On the notion of “settling” see *ibid.* (1st ed.), pp. 6-9. What this

notion means for Ockham is, I think, that the semantic relation between a proposition and the corresponding state of affairs is asymmetric in that the obtaining of the state of affairs is the condition for the truth of the proposition, not *vice versa*. Thus, a proposition has a determinate truth value in virtue of the fact that its corresponding state of affairs obtains. Future contingent propositions are true because their corresponding states of affairs obtain in the actual world. Adams and Kretzmann do not define “determinate truth” or “determinate falsity” for Ockham, though they think it is easy to see how it must differ from the Aristotelian conception. On their analysis, it would seem that “*x* is *A* at *t*” is determinately true at *t** just in case it is settled by something actual at some time or times that *x* is (was, will be) *A* at *t*, and “*x* is *A* at *t*” is determinately false at *t** just in case it is settled by something actual at some time or times that *x* is not (was not, will not be) *A* at *t*. In the second edition, the notion of “settling” has been replaced for the most part by that of “potency for opposites.” Accordingly, “*x* is *A* at *t*” is determinately true at *t** just in case there is (was, will be) at some time or other no potency in things for *x*’s not being *A* at *t*, and “*x* is *A* at *t*” is determinately false at *t** just in case there is (was, will be) no potency in things for *x*’s being *A* at *t*. But whatever the terminology, these notions seem superfluous. Why not simply say that “*x* is *A* at *t*” is determinately true just in case *x* is (was, will be) *A* at *t*, and “*x* is *A* at *t*” is determinately false just in case *x* is not (was not, will not be) *A* at *t*? See also the relevant remarks of Freddoso, “Accidental Necessity,” pp. 264-5.

10. Ockham *Summa logicae* 3.3.32.162. “positum est in actu.” In her Introduction to the second edition of her translation of the *Tractatus*, Adams makes a great deal of this notion.
11. Ockham *Ordinatio* 1.38.E [Contra opinionem Scoti].
12. Ibid. 1.38.N; idem *Tractatus* 1.F.119-26; 1.G.139-42; 2.3.K.241-53; 2.4.L.272-83.
13. Ockham *Ordinatio* Prologus 6.
14. Ibid. 1.38.M; idem *Perihermeneias* 1.6.15.27-39 [9.19a39-19b4]. See also comments of Freddoso, “Accidental Necessity,” pp. 276-7; Adams, “Foreknowledge,” pp. 112-4; but Adams fails to take this into account in her “Introduction” (2d ed.), p. 5.
15. Boehner, “Problems,” p. 49.
16. Ockham *Ordinatio* 1.38.P [Ad argumenta principalia]; idem *Perihermeneias* 1.6.15.18-26 [9.19a39-19b4]; idem *Summa logicae* 3.3.32.116-26; idem *Tractatus* 1.C.59-67; 1.M.209-20.
17. Ockham *Ordinatio* 1.38.P [Ad argumenta principalia]; idem *Perihermeneias* 1.6.15.21-2 [9.19a39-19b4]; idem *Summa logicae* 3.3.32.117-18, 128-9; idem *Tractatus* 1.C.59-67; 1.M.209-20. See contemporary re-interpretations of Ockham’s distinction in Marilyn Adams, “Is the Existence of God a ‘Hard’ Fact?” *Philosophical Review* 76 (1967):492-503 and Freddoso, “Accidental Necessity,” pp. 257-78; Alvin Plantinga, “On Ockham’s Way Out,” *Faith and Philosophy* 3 (1986): 235-69. A discussion of these proposals and their merits may be reserved for another place, as they do not purport to capture Ockham’s own viewpoint.
18. See his treatments of the objection in Ockham *Ordinatio* 1.38.A, M [Opinio propria auctoris]; idem *Perihermeneias* 1.6.15.7-90 [9.19a39-19b4]; idem *Summa logicae* 3.3.32.54-69; idem *Tractatus* 1.O.229-38.
19. Ockham *Tractatus* 1.O.234-8.
“Sed in illis non est veritas determinata, quia secundum eum nulla ratio potest assignari quare magis una pars sit vera quam alia, et ita vel utraque pars erit vera vel neutra; sed non est possibile quod utraque pars sit vera, ergo neutra, et igitur neutra scitur.”
20. Ockham *Ordinatio* 1.38., [Opinio propria auctoris]; idem *Perihermeneias* 1.6.15.27-39 [9.19a39-19b4]. For Ockham’s views on indeterminism of the will see Philotheus Boehner, “Ockham’s *Tractatus de praedestinatione et de praescientia Dei et de futuris contingentibus* and its Main Problems,” in *Collected Articles on Ockham*, ed. Elijus M. Buytaert, Philosophy Series (St. Bonaventure, N.Y.: Franciscan Institute, 1958), p. 426; David W. Clark, “Ockham on Human and Divine

- Freedom," *Franciscan Studies* 38 (1978):143-7. The will is self-determined and can refrain from acting even when all the necessary requirements of action are present.
21. Ockham *Tractatus* 1.P.239-44.
 22. Ibid. 1.F.113-26.
 23. Ockham is often very imprecise in his formulations. Actually he states elsewhere that future-tense propositions do become false, namely, when the state of affairs is no longer future but present. (Ockham *Tractatus* 2.3.F.146-59.) What he means could be better expressed by outfitting future-tense propositions with tenseless verbs and definite temporal indexicals, for example, "Socrates *sits* at t_n ." Such a proposition is also immutably true or false, yet prior to t_n it is temporally contingent. These propositions are true (or false) and contingent at all $t < t_n$, but true (or false) and necessary at all $t > t_n$. See also Boehner, "Problems," p. 58.
 24. Ockham *Tractatus* 1.F.124-6. "Sicut haec est vera 'Deus scit, quod iste salvabitur', et tamen possibile est quod numquam sciverit quod iste salvabitur. Et ita ista propositio est immutabilis, et tamen non est necessaria sed contingens."
 25. Adams, "Foreknowledge," pp. 192-3, 203, 205-6; Adams and Kretzmann, "Introduction" (1st ed.), pp. 20-1; cf. whole of pp. 20-6.
 26. See Boehner, "Main Problems," p. 437.
 27. Adams and Kretzmann, eds., *God's Foreknowledge* (1st ed.), p.57.
 28. The discussion opens and closes with statements concerning God's knowledge of future contingents, while the arguments seek to prove God cannot have certain cognition of future contingents. Even within the arguments themselves, the terms are used interchangeably; e.g., "...it does not seem to preserve the certainty of God's knowledge in respect of future things that depend absolutely on a created will" (...non videtur salvare certitudinem scientiae Dei respectu futurorum quae simpliciter dependent a voluntate creata....) and "...since the determination of the [created] will was not from eternity, God did not have a certain cognition of them...." (...cum illa determinatio voluntatis non fuit ab aeterno, non habuit Deus certam notitiam illorum.'').
 29. Ockham *Ordinatio* 1.38.J-M. E.g., "...however much the certainty of [God's] knowledge can be preserved by the determination of the will...." (...quantumcumque posset salvari certitudo scientiae per determinationem voluntatis....) and "...God did not from eternity have a certain cognition of future contingents as a result of the determination of the divine will" (...Deus ab aeterno non habuit certam notitiam futurorum contingentium propter determinationem voluntatis divinae.''). Again, "...the Philosopher would say that God does not know some future contingents evidently and certainly...." (...Philosophus diceret quod Deus non scit evidenter et certitudinaliter aliqua futura contingentia.'') and "This argument notwithstanding, it must nevertheless be maintained that God has evident cognition of all future contingents." ('Ista tamen ratione non obstante, tenendum est quod Deus evidenter cognoscit omnia futura contingentia.'') Subsequently Ockham speaks repeatedly of the divine cognition by which future contingents are known.
 30. See remarks of Freddoso, "Accidental Necessity," pp. 267-8, concerning propositions like "David believes Katie will travel to Rome next week." He thinks Ockham regarded such propositions as dependent on the truth of a future proposition—a clear mistake, he adds, since "...past hopes, fears, beliefs, desires, predictions, etc., of historical agents are clearly unalterable elements of our past and must be counted as part of our history...." (Ibid., p. 268.) Nevertheless, Freddoso is sympathetic to Ockham's claim that in God's case at least, such propositions are temporally contingent, since propositions like "David correctly believes that Katie will be in Rome at some time" are indeed temporally contingent, and all God's beliefs are, necessarily, true beliefs. (Ibid., pp. 270, 278.)
 31. Ockham *Tractatus* 2.2.D.60-8, 74-7, 95-8; 2.4.P.329-38; idem *Ordinatio* 1.38.J [Contra opinionem Scoti], O [Opinio propria auctoris].
 32. Ockham *Ordinatio* 1.38.E. [Contra opinionem Scoti].

33. Ibid. 1.38.N. [Opinio propria auctoris].
34. Ockham *Ordinatio* 1.38.0 [Opinio propria auctoris]. "...Deus habet scientiam determinatam de futuris contingentibus, quia determinate scit quae pars contradictionis erit vera et quae falsa."
35. Ibid. "...quod Deus necessario sciat hoc futurum contingens, sic non est concedendum quod habeat scientiam necessariam. Quia sicut ipsam contingenter erit, ita Deus contingenter scit ipsum fore."
36. Adams, "Introduction" (2d ed.), p. 20. She writes, "Ockham's response would be to insist on divine infallibility and compromise the analogy between divine and human judgment. For if all God's judgments are infallible, 'God judges that *p* is true' is expounded in part by '*p* is true' just as much as 'God knows that *p* is true' is. Where *p* is a future contingent proposition, 'God judges (judged) that *p* is true' will also be a future contingent proposition, so far as its subject matter is concerned (*secundum rem*)."
37. Ockham *Tractatus* 1.P.244-5; cf. idem *Ordinatio* 1.38.J [Contra opinionem Scoti].
38. Ockham *Ordinatio* 1.38.J [Contra opinionem Scoti]. "...evidentia certa et infallibilis non potest haberi per talem determinationem, ex quo simpliciter potest numquam fuisse."
39. Ockham *Tractatus* 1.P.275-6. "...igitur propter talem determinationem nulla habebitur certa notitia."
40. Ockham *Ordinatio* 1.38.E [Opinio propria auctoris]; idem *Tractatus* 3.A-B.4-46.
41. See Boehner, "Problems," p. 55; Frederick Copleston, *A History of Philosophy*, vol. 3: *Ockham to Suarez* (Westminster, Md.: Newman Press, 1953), pp. 92-3; Gordon Leff, *William of Ockham* (Manchester: Manchester University Press, 1975), p. 448. Perhaps his problem was not so much *how it is possible* for God to know certainly a proposition which may fail to be true—indeed in the next article he explains that very well—, but rather *how* He knows it (*quomodo hoc scit*), that is, the *way* He knows future contingents (*modum, quo Deus scit futura contingentia*). Ockham's own account of the divine essence's intuitive cognition is an attempt to assign the way (*modus assignari*) God knows future contingents. Similarly in the *Ordinatio* Ockham says he cannot describe the way in which God knows future contingents (*modum, quo Deus scit omnia futura contingentia*). Again his analysis of the intuitive cognition of the divine essence is an attempt to describe the way (*modum exprimere*). His concern seems not to be with how it is possible to have certain cognition of contingents, but with the means whereby one may have such cognition.
42. Ibid. 1.38.L [Opinio propria auctoris]. "...indubitanter est tenedum quod Deus certitudinaliter et evidenter scit omnia futura contingentia. Sed hoc evidenter declarare et modum quo scit omnia futura contingentia exprimere est impossibile omni intellectui pro statu isto." Cf. idem *Tractatus* 1.P.277-8: "...it is impossible to express clearly the way in which God knows future contingents. Nevertheless, it must be held that He knows them only contingently." "...impossibile est clare exprimere modum quo Deus scit futura contingentia. Tamen tenendum est quod scit contingenter tantum."
43. Ockham *Ordinatio* 1.38.M. [Opinio propria auctoris].
44. Adams and Kretzmann, "Introduction," (1st ed.) pp. 25-6.
45. Ockham *Ordinatio* 1.38.M [Opinio propria auctoris]. "...hoc non esset quia futura contingentia essent sibi praesentia, nec per ideas tamquam per rationes cognoscendi, sed per ipsammet divinam essentiam vel divinam cognitionem, quae est notitia qua scitur, quid est falsum et quid est verum, quid fuit falsum et quid fuit verum, quid erit falsum et quid erit verum."
46. Kenny, for example, accepts Ockham's critique of Scotus, but ignores Ockham's own reconciliation of divine foreknowledge and human freedom because Ockham, while holding to divine foreknowledge of future contingents, "was himself unable to present any coherent account of divine foreknowledge." (Kenny, *God of the Philosophers*, p. 58.) But Ockham's account of the *means* of God's foreknowledge has no effect on the cogency of his reconciliation of foreknowledge and indeterminism.

Kenny conflates these two questions, which leads him off into a discussion of *scientia media* as a means of God's foreknowledge, apparently under the impression that if it cannot be explained *how* God knows future contingents, then His knowledge of them is irreconcilable with indeterminism (ibid., p. 71.). Adams and Kretzman, on the other hand, proceeding from their interpretation of Ockham based on the distinction between *notitia* and *scientia*, think Ockham has merely restated in technical terms what must be held according to the faith, namely, God's foreknowledge is infallible. Ockham must give some justification for calling God's cognition of future contingents intuitive and evident. (Adams and Kretzman, "Introduction" (1st ed.), pp. 25-6; cf. Adams, "Foreknowledge," p. 200; Adams appears to have abandoned this criticism in "Introduction" [2d ed.], pp. 19-20.) But if it is an essential property of God that He knows all true propositions, why must any further justification or explanation be given? All that need be explained is why the contingency of divine knowledge is not incompatible with the certainty and infallibility of divine knowledge, as Ockham does in *Tractatus* 2.2. Moreover, on Ockham's view, God does not, it seems, acquire or come by His knowledge; He simply *has* it, innately and eternally, so that no further explanation of the means of His foreknowledge seems required. Copleston remarks, "As to the mode of God's knowledge, Ockham does not offer any suggestion beyond saying that the divine essence is such that God does know future contingent facts"; he does not have recourse to the Scotist solution: "...he very sensibly admits that he cannot explain how God knows future contingent events." (Copleston, *Ockham to Suarez*, p. 93.)

47. Adams and Kretzman, "Introduction," (1st ed.) pp. 17-19, 22-4.
48. According to Boehner, it is Ockham's doctrine that one part of a contradiction is true because God wills it to be true; but He wills it contingently. God's will is indeed the cause of the proposition's truth, but not of God's knowledge of that truth. (Bohner, "Main Problem," pp. 440-1; idem, "Problems," p. 55; Leff, *Ockham*, p. 452.) In this case, it seems that divine determinism is inescapable, since only God's antecedent will can be operative. Contingency would entail taking cognizance of what is already true.
49. Ockham *Tractatus* 2.1.B.31-3.
50. Ockham *Perihermeneias* 1.6.7.16-8.12 [9.18a33-18b16].
51. Ockham *Ordinatio* 1.38.N. [Opinio propria auctoris].
52. Ibid. "Immo haec est contingens in tantum quod quantumcumque haec sit vera 'Deus scit quod haec pars contradictionis erit vera,' tamen possibile est quod haec numquam fuerit vera. Et in isto casu potentia est ad oppositum illius sine omni successione, quia possibile est, quod numquam fuerit."
53. Ockham *Tractatus* 1.G.141-2.
54. Ockham *Ordinatio* 1.38.P [Ad argumenta principalia]; cf. idem *Tractatus* 1.B.38-49; M.208-20.
55. Ockham *Tractatus* 2.1.B.34-8.
56. Ibid. 2.2.C.43-55.
57. See the revealing note in Adams and Kretzman, eds., *Predestination, God's Foreknowledge, and Future Contingents*, p. 57. Ironically, Adams in her dissertation demurs to discuss this article because, she thinks, it sheds no light on what solution Ockham might give to the problem of God's infallibility. (Adams, "Foreknowledge," p. 288.)
58. Ockham *Tractatus* 2.2.D.65-7. "...quia sequitur 'si Deus novit me' etc., igitur haec est vera 'ego sedebo cras,' quia nihil scitur nisi verum."
59. Ibid., 76-7. "...Deus...scit me sessurum cras...."
60. Ibid. 2.4.L-P.255-338.
61. Ibid. 2.4.L.261-71; cf. idem *Ordinatio* 1.38.A, N-P.
62. Ockham *Tractatus* 2.4.L.263-5. "quia ipsa essentia divina est unica cognitio necessaria et immutabilis omnium...necessariorum et contingentium."
63. Ibid. "...quia sicut hoc futurum contingenter erit, ita Deus scit ipsum contingenter fore, quia potest non scire ipsum fore, si ipsum scit."

NOTES TO CHAPTER SEVEN

1. For the historical context of Molina's thought as well as a disinterested exposition of the views enunciated in the *Concordia*, see the fine article in the *Dictionnaire de théologie catholique*, vol. 10, pt. 2, ed. A. Vacant, E. Mangenot, and E. Amann (Paris: Librairie Letouzey et Ane, 1929), s.v. "Molinisme," by E. Vansteenbergh, cols. 2094-2187. Also helpful is the entry in the *Hastings Encyclopaedia of Religion and Ethics*, s.v. "Molinism," by Ælfred Whitacre.
2. Alvin Plantinga, *The Nature of Necessity* (Oxford: Clarendon Press, 1974), pp. 174-80; cf. his earlier *God and Other Minds* (Ithaca, N.Y.: Cornell University Press, 1967), pp. 140-8.
3. The issue was brought to the attention of analytic philosophers by Plantinga and particularly Robert Adams in their exchange at a symposium of the American Philosophical Association, Dec. 29, 1973; Plantinga's paper and Adams's comment were published as Alvin Plantinga, "Which Worlds Could God have Created?" *Journal of Philosophy* 70 (1973):539-52 and Robert M. Adams, "Middle Knowledge," *Journal of Philosophy* 70 (1973):552-4.
4. Luis Molina, *Molina on Divine Foreknowledge: Part IV of "De Liberi Arbitrii cum Gratia Donis, Divina Praescientia, Providentia, Praedestinatione et Reprobatione Concordia"*, trans. with an Introduction and Notes by Alfred J. Freddoso (forthcoming). All citations of the *Concordia* shall be from this translation. The Latin text is Ludovici Molina, *Liberi arbitrii cum gratiae donis, divina praescientia, providentia, praedestinatione et reprobatione concordia*, ed. Johannes Rabeneck (Ona and Madrid: Soc. Edit. "Sapientia," 1853). References to the *Concordia* will generally be by part, disputation, and subsection.
5. See again the reference works cited in note 1, "Molinisme. v. L'essence et les diverses modalités du Molinisme," by Vansteenbergh, cols. 2166-72 and "Molinism," by Whitacre. Schneemann reproduces an amusing letter by a Dominican brother, who, having just read Molina for himself and appalled at the caricature of Molina's views taught him by his professors of theology, began to doubt whether he could have any confidence in their expositions of Augustine and Aquinas as well! (P. Schneemann, *Controversiarum de Divinae Gratiae liberique arbitrii concordia, initia et progressus enarravit Gerardus Schneemann, S.J.* [Friburgi Brisgaviae: Sumpus Herder, 1881], p. 218.)
6. For a discussion of Aquinas's doctrine of the presence of all things to God in eternity and of Scotus's several objections to this doctrine, see pp. 129-133. There I suggested that the differences between Scotus and Aquinas were perhaps best understood in terms of competing theories of time, Aquinas presupposing a B-theory and Scotus an A-theory. Molina, however, tries to combine the two, claiming that eternity is an indivisible, simultaneously whole duration which co-exists with the whole of time and to which temporal entities are simultaneously present with the same existence which they have successively in time. Hence, in response to Scotus's objections, Molina maintains (i) God can co-exist with future things because these things exist in the "now" of eternity; (ii) a time which is future in relation to us can co-exist with and be present to eternity; (iii) though temporally distinct events cannot co-exist in their own proper durations, still they can co-exist in the atemporal duration of some third thing, viz. God; (iv) contradictory predicates can be consistently attributed to a temporal subject insofar as it exists in the "now" of eternity so long as the propositions doing so are both affirmative and do not signify the same temporal "now"; (v) a thing does not exist in eternity before it exists in time. (Molina *Concordia* 4.48.) For a defense of what seems to be an essentially Molinist view of eternity, see Eleonore Stump and Norman Kretzmann, "Eternity," *Journal of Philosophy* 78 (1981):429-58; on the difference between this and the classical, Boethian view of eternity see pp. 91-96.
7. Molina *Concordia* 4.49.4-6.
8. *Ibid.* 4.49.7.

9. Ibid. 4.49.15. "...nihil...conducit vel ad ostendendam certitudinem praescientiae divinae de futuris contingentibus vel ad conciliandam contingentiam rerum cum divina praescientia."
10. Ibid. 4.49.22-4.
11. Ibid. 4.50. Molina attempts to rebut the four objections of Scotus to Bonaventure's doctrine of foreknowledge based on the divine ideas (cf. pp. 127-129 for a discussion of Scotus's objections). Scotus, on Molina's account, lodges the following objections against this doctrine: (i) God's ideas are only of the terms of a proposition (*complexis*), not the conjoining of predicate and subject; (ii) the divine ideas are known naturally, not freely, and so cannot account for knowledge of contingent propositions; (iii) the divine ideas alone can make no differentiation between events that are possibly future and actually future; (iv) God's will, not His ideas, determine that things shall exist at one time rather than another. Molina responds that all states of affairs are known naturally to God, not only as being possible, but also as being future "under the condition that." Once God decides to bring about certain circumstances, He then knows the future absolutely, without any condition or hypothesis. (See the exposition of the doctrine of *scientia media* which follows in the text.) Hence, in response to Scotus: (i) the divine ideas naturally represent to God all possible states of affairs or circumstances; (ii) only conditioned futures are known naturally by the divine ideas, but given the decision of the divine will to actualize some order of circumstances, the future is known unconditionally; (iii) the divine ideas do not distinguish conditioned from absolute future events, but the divine will serves this purpose; (iv) the decision of the divine will is required in order for the temporal order to be known. Such a drastic revision of the doctrine of divine ideas inevitably raises the suspicion that Molina cast his theory as a defense of this doctrine in an attempt to make his position seem less controversial and innovative.
12. Ibid. 4.49.8.
 "Deus non ex eo solo capite, quod res existant extra suas causas in aeternitate, cognoscit certo futura contingentia, sed ex altitudine suae scientiae prius nostro modo intelligendi, cum fundamento tamen in re, quam quicquam statueret, comprehendit in seipso omnia quae contingenter aut mere libere per causas omnes secundas ex sua omnipotentia possibiles essent futura ex hypothesi, quod hos vel illos rerum ordines cum his vel illis circumstantiis vellet statuere; eo autem ipso, quod libera sua voluntate fieri statuit eum ordinem rerum et causarum quem reipsa statuit, prius non solum quam quicquam esset in tempore, sed etiam nostro modo intelligendi cum fundamento in re quam quicquam creatum existeret in duratione aeternitatis..."
13. For a discussion of Scotus's view, see pp. 136-137.
14. On Aquinas's doctrine, see pp. 100, 123-124.
15. Molina *Concordia* 4.53.1.20.
16. Ibid.
 "...sed solum in eo esse positam, quod propter dependentiam actus voluntatis a notitia intellectus et non e contrario concipitur enim a nobis tamquam praesuppositum, quando nondum concipitur aliud, cum tamen in re sint semper coniuncta....Quare sicut ex eo,... quod scientia divina, ut praerequisita est ad actum voluntatis, concipiatur a nobis ut nondum habens adiunctam notitiam determinationis eiusdem actus, non proinde in re est aliquando sine ea notitia...."
17. Ibid. 4.52.9.
 "...per quam omnia ea cognovit ad quae divina potentia sive immediate sive interventu causarum secundarum sese extendit tum quoad naturas singulorum et complexiones eorum necessarias tum etiam quoad contingentes, non quidem quod futurae essent vel non essent determinate, sed quod indifferenter esse et non esse possent, quod eis necessario competit atque adeo sub scientiam Dei naturalem etiam cadit."

Freddoso's note that God knows only metaphysically necessary states of affairs by

His natural knowledge is misleading, since Molina explicitly states that God knows by it contingent states of affairs as well; but Freddoso is simply being more technically precise than Molina, meaning that God by His natural knowledge knows, for any contingent state of affairs p , the metaphysically necessary state of affairs of p 's being *able* to obtain or not.

18. Ibid. 4.50.17. "... ideae divinae naturaliter repraesentant Deo ante omnem determinationem liberam suae voluntatis omnem complexionem contingentem futuram sub illa hypothesei et condicione...."
19. Ibid. 4.52.9. "Aliam mere liberam qua Deus post liberum actum suae voluntatis absque hypothesei et condicione aliqua cognovit absolute et determinate ex complexionibus omnibus contingentibus, quatenam re ipsa essent futurae, quae non item."
20. Molina notes that even in the case in which God decides not to create, He would have free knowledge, though it would be comprised of negative propositions, e.g., "Creatures do not exist," "The Son will not become incarnate," etc. (Ibid. 4.53.4.3.)
21. Ibid. 4.52.13. "plenissimae atque illimitatae deliberationi"
22. In responding to the Thomistic doctrine that God's knowledge is the cause of things, Molina agrees that God's natural and middle knowledge are a cause of future contingents, but denies that they are the total cause, since the free will of creatures is also part of the cause of which world obtains. (Ibid.4.52.31.)
23. Ibid. 4.52.9.
 "Tertiam denique mediam scientiam quo ex altissima et inscrutabili comprehensione cuiusque liberi arbitrii in sua essentia intuitus est, quid pro sua inata libertate, si in hoc vel illo vel etiam infinitis rerum ordinibus collocaretur, acturum esset, cum tamen posset, si vellet, facere re ipsa oppositum...."
24. Molina rejects any analysis of freedom in terms of spontaneity, for even animals, children, and the demented possess the latter. True liberty must entail the ability to do or refrain from an act or to do the opposite of an act under identical causal conditions. This liberty of indifference is a fact of experience, is theologically presupposed by the existence of sin, and is taught by the Scriptures and the Church Fathers. The ultimate source of contingency in the world is God's own free will, but the immediate source is the free will of men and angels as well as a sort of vestige of freedom in certain animals. Were these removed from the world, then, barring divine miracles, the universe would be totally deterministic and contingency would have no place in it. For more on Molina's view of free will, see Blaise Romeyer, "Libre arbitre et concours selon Molina," *Gregorianum* 23 (1942):171-5.
25. Molina *Concordia* 4.49.13.
26. Ibid. 4.52.10. "Si namque liberum arbitrium creatum acturum esset oppositum, ut revera potest, idipsum scivisset per eandem scientiam, non autem quod re ipsa scit. Quare non est magis innatum Deo scire per eam scientiam hanc partem contradictionis ab arbitrio creato pendentem quam oppositam."
27. Ibid. 4.50.15.
 "[sunt] repraesentati Deo... naturaliter ante omnem actum et determinationem liberam voluntatis divinae complexiones omnes contingentes non solum secundum esse possibile, sed etiam secundum esse futurum non absolute, sed sub condicione et ex hypothesei, quod Deus statuatur hunc vel illum ordinem rerum et causarum cum his vel illis circumstantiis creare. Accedente vero determinatione libera voluntatis,... certo cognoscit complexiones omnes contingentes secundum esse futurum absolute et simpliciter ac sine ulla iam hypothesei et condicione."
28. Ibid.
 "...rationem ob quam Deus certo cognoscat, quatenam pars contradictionis cuiusque earum complexionem contingentium quae pendent a libero arbitrio creato sit futura, non esse determinationem voluntatis divinae qua liberum arbitrium creatum inflectat et determinet ad unam aut alteram partem, sed esse determinationem liberam qua liberum arbitrium in hoc vel illo ordine rerum et circumstantiarum statuit creare; neque hanc solam determinationem arbitramur esse

rationem sufficientem, quod certo cognoscat, quae pars contradictionis cuiusque harum complexionum sit futura, sed hanc una cum comprehensione in sua essentia cuiuscumque liberi arbitrii creati per scientiam naturalem qua comprehensione ante illam determinationem voluntatis certo scit, quid tale liberum arbitrium sit facturum pro sua libertate ex hypothesi et condicione, quod illud creet et constituat in eo ordine rerum, cum tamen possit, si velit, facere oppositum, et si esset facturum, ut potest, Deus id illa eadem scientia et comprehensione liberi arbitrii in sua essentia scivisset et non id quod re ipsa scit a libero arbitrio esse agendum.”

29. Ibid. 4.52.19. “...Deus nullam scientiam sumat a rebus, sed quicquid cognoscit id in sua essentia et in determinatione libera suae voluntatis cognoscat et comprehendat....” Cf. 4.49.12: “God does not get His knowledge from things, but knows all things *in Himself* and *from Himself*; therefore, the existence of things, whether in time or eternity, contributes nothing to God’s knowing with certainty what is going to be or not going to be.” (“Deus non accipit cognitionem a rebus, sed in seipso atque ex se ipso cognoscit omnia; ergo existentia rerum, sive in tempore sive in aeternitate, nihil confert ut Deus certo sciat, quid futurum aut non futurum sit.”)

30. Ibid. 4.52.21.

31. Ibid. 4.49.11.

“Deus per scientiam naturalem se ipsum comprehendit et in se ipso omnia quae in ipso eminenter sunt atque adeo liberum arbitrium cuiuscumque creaturae quam per suam omnipotentiam potest condere. Ergo ante ullam liberam determinationem suae voluntatis ex altitudine suae scientiae naturalis qua infinite superat singula quae in seipso eminenter continet penetrat, quid liberum arbitrium cuiusque creaturae data hypothesi, quod velit illud creare in hoc vel in illo ordine rerum.... Indignum namque altitudine et perfectione divinae scientiae, immo et impium minimeque cohaerens cum tanta comprehensione liberi arbitrii singularum creaturarum esset asserere Deum ignorare, quid ego pro libertate mei arbitrii essem facturum, si me constituisset in alio ordine rerum....”

32. Ibid. 4.50.15.

“ipsius immensam omnique ex parte illimitatam scientiam, qua quicquid sub suam omnipotentiam cadit altissimo ac eminentissimo quodam modo comprehendit, etiam cadit ut ita liberum arbitrium creatum penetret ut, in quam partem pro sua innata liberate se sit inflexurum, certo deprehendat ac intueatur.”

33. Ibid. 4.52.11.

“Nor do I understand very well how total freedom would be preserved in God if, before the act of His will, He foreknew which part it was going to be turned toward. For if such knowledge existed, then He would in no way be able to choose the opposite part; thus, if He foreknew before that determination which part His will was going to be turned toward, then I do not see at what point He had the freedom to choose the opposite part.”

“Nec satis percipio, quam ratione in Deo integra maneret libertas, si ante actum suae voluntatis praecognosceret, in quam partem esset inflectenda. Etenim existente tali scientia nulla ratione parte oppositam eligere posset; quare si ante determinationem praecognosceret, in quam partem foret inflectenda, non video, quando libertatem habuerit ad partem oppositam eligendam.”

Cf. 4.53.1.19.

34. Ibid. 4.52.12.

“...quandoquidem in illo priori in quo id non libere, sed quasi naturaliter scivit in potestate ipsius non fuit scire contrarium, quippe cum non libere, sed quasi naturaliter eam contradictionis partem sciverit, praexistente vero eiusmodi scientia contradictionem implicet velle aut scivisse contrarium, quoniam aut Deus falleretur aut, postquam aliquid scivit, id non scivisset, quod contradictionem involvit....”

35. In fact Molina does not consider deliberation a necessary condition of willing a free decision. See *ibid.* 4.47.7.

36. Ibid. 4.52.11.

"Unde neque Deum concedimus per scientiam naturalem sere mediam (quam de hac re in eo negamus) intueri ante determinationem suae voluntatis, quam partem ipse sit electurus, eo quod intellectus in Deo ea altitudine et praestantia non superet essentiam ac voluntatem divinam qua essentias ac voluntatis creatas longe superat. Quare sicut homo et angelus ante liberam determinationem suarum voluntatum non cognoscunt, in quam partem se inflectere debeant, eo quod intellectus in eis essentiam ac voluntatem infinito illo excessu non superent: ita neque Deus, antequam voluntatem suam determinet, in quam partem ea sit inflectenda cognoscit."

Cf. 4.52.13.

37. Ibid. 4.52.17.

"Ad haec namque cognoscenda non satis est adequatio potentiae cognoscentis cum radice contingentiae ipsorum seu comprehensio talis radices, sed necessaria est altissima et eminentissima comprehensio huiusce radices, qualis est in solo Deo comparatione liberi arbitrii suarum omnium creaturarum."

38. Ibid. 4.52.13.

39. Ibid.

40. Ibid.

"Actus enim ille liber circa res a Deo factibiles... libere se in alteram contradictionis partem determinavit non solum libere statuendo quae decrevit facere aut permittere libereque statuendo reliqua non facere aut non permittere, sed etiam libere statuendo, quae esset voliturus ex quacumque hypothesi quae esse potuit et non fuit."

41. Ibid. 4.49.9-13.

42. Ibid. 4.50.15.

43. Ibid. 4.51.

44. Ibid. 4.51.18.

"At vero adversarii...docent libertatem arbitrii et contingentiam rerum cum divina praescientia convenire...., quod, si res aliter eveniat, quando id actu contigerit, Deus ipse efficiet ut non aliud quam illudmet quod evenit ex omni aeternitate praesciverit. Quasi vero Deus scientiam futurorum contingentium acciperet ab ipso rerum eventu et ante eum non maior esset certitudo in divina scientia quam in obiecto quod est adhuc contingenter futurum, et quasi¹ non prius in se ipsa haberet ex aeternitate certam determinationem ad alteram partem contradictionis rei contingenter futurae, quam res ipsa eandem determinationem ex tempore nanciscatur, quando extra suas causas ponitur.

¹ *supple:* eius scientia"

45. Lvdovici Molinae *Commentaria, in primam D. Thomae partem, in duos tomos diuisa* (Lyon: Louis Prost, 1622), 25.4. Molina's objection is much more serious than Freddoso suggests, who sees the argument as directed against those who concede God only a partial power over the past, aiming to show merely that if God has partial power over the past, then He has complete power. But Molina's aim is to show that power over the past is simply logically impossible, not merely that Ockhamists are self-inconsistent.

46. Molina *Concordia* 4.51.18.

"...Deum...certissime cognoscere..., quid pro libertate earum contingenter sit futurum, ita tamen ut possit contingere oppositum, et si futurum esset, ut re vera potest, Deus ex aeternitate id certissime scivisset et non id quod actu scit.... Quo fit ut rerum contingentia atque libertas arbitrii in futurum optime consentiant cum certa et non solum omnino immutabili Dei tam scientia quam voluntate, sed etiam ita fixa ac stabili ut iam modo contradictionem implicet Deum ex aeternitate contrarium voluisse aut cognovisse eventurum."

47. Ibid. 4.51.24. Cf. 52.30.

48. Ibid. 4.52.18.

49. Ibid. 4.52.31.

50. Ibid. 4.52.32. "...contradictionem implicat modo id non praescivisse, tum quod ad praeteritum non sit potentia, tum etiam quod in Deum nulla possit cadere mutatio."
51. Ibid. 4.52.37.
 "Cum enim scientia et cognitio nostra non habeat maiorem certitudinem, quam sit certitudo obiecti secundum se spectati, utique si haberemus certam scientiam de futuris continentibus propositionesque earundem rerum determinate essent verae, id ex eo esset, quia ipsae secundum se certo et determinate essent futurae, quod non alia ratione esse posset, nisi quia res secundum se essent necessariae necessitate consequentis. Cum vero scientia divina... de futuris etiam contingentibus in quibus nulla est certitudo ex se et ex suis causis sit certissima, ut saepe explicatum est, fit ut ex eo, quod futura contingentia certo cognoscuntur a Deo, non sequatur necessario ex natura rei esse eventura, ut sequeretur si cognitio nostra de iis rebus esset certa aut propositiones quas de eisdem formamus essent determinate verae."
52. Michel, for example, asserts that Molina himself blocked the avenue, taken by Suarez, of holding that future contingent propositions have a truth value, which must be known by God; then he cites Suarez in refutation of Molina's doctrine of supercomprehension. (*Dictionnaire de théologie catholique*, vol. 14, pt. 2, s.v. "Science. II. Science de Dieu," by A. Michel, col. 1618). Garrigou-Lagrange proclaims, "The response of Suarez leads to fatalism, according to Molina; the response of Molina leads to fatalism, according to Suarez. The defenders of middle knowledge are caught between Scylla and Charybdis. Is there any escape?" (R. Garrigou-Lagrange, *Dieu: Son existence et sa nature*, 2 vols., 11th ed. [Paris: Beauchesne, 1950], 2: 805.)
53. Paul Dumont, *Liberté humain et concours divin d'après Suarez* (Paris: Gabriel Beauchesne et ses fils, 1936), p 210. According to Dumont, Suarez similarly took aim at Molina in his opusculum *De praescientia Dei* 1.1.8.5.
54. Molina *Concordia* 4.52.14.
 "Quidam contedentes in futuris contingentibus semper alteram partem, antequam eveniat, esse ex aeternitate veram determinate et alteram determinate falsam eaque ratione ex natura rei unam esse cognoscibilem futuram determinate et alteram non futuram determinate ex eo capite, quod quicquid est ex rei natura cognoscibile Deus ante omnem actum suae voluntatis naturaliter cognoscat, arbitrantur Deum ante omnem actum liberum suae voluntatis scire non solum, quid per arbitrium creatum sit ex quacumque hypothesi futurum, sed etiam, quid ipsemet Deus posterius natura...sit libere voliturus, eo quod id similiter, antequam a Deo statuatur, sit determinate verum."
55. Ibid. 4.52.15.
 "...sane dicendum non est Deum ante determinationem liberam suae voluntatis cognoscere, in quam partem se sit determinatura, sed divinum intellectum in eo priori solum illi ostendere cetera omnia universim, etiam quae per quodcumque creabile arbitrium sunt ex quacumque hypothesi rerumque ordine futura..."
56. See p. 155.
57. This commentary exists in manuscript form in Evora, Spain, at the Biblioteca Publica, cod. 118-1-6 [= G], but the essential section for our purposes has been published as Ludovicus Molina, "Quaestio de futuris contingentibus," in Friedrich Stegmüller, ed., *Geschichte des Molinismus*, vol. 1: *Neue Molinaschriften*, Beiträge zur Geschichte der Philosophie und Theologie des Mittelalters 32 (Münster i.W.: Verlag des Aschendorffschen Verlagsbuchhandlung, 1935), pp. 1-9. References to this work will be first to the codex and then to Stegmüller's pagination.
58. Molina *Quaestio* G 184v; p. 1. "Doctorus Aristoteles hoc capite, in enuntiationibus contradictoriis de futuro in materia contingenti neutram partem esse determinate veram et alteram falsam, sed alteram indeterminate esse veram et alteram falsam, docet primo, in omnibus contradictoriis de praesenti et de praeterito alteram partem esse determinate veram et alteram falsam, praeterquam in definitis in quibus interdum utraque pars est determinate vera...."

59. Ibid. G 188v; p. 7.
60. Ibid. G. 189r; p. 8. "Ad primum ergo, cum infertur in prima consequentia: ergo significat alterum tantum, si intelligat adversarius alterum tantum determinate, neganda est consequentia; si vero intelligat alterum tantum indeterminate, tamen vel hoc vel illud, concedenda est prima consequentia et neganda est secunda."
61. Ibid. G 188v; pp. 7-8.
62. Ibid. G 189r; pp. 8-9.
 "Et ratio est, quia ut enuntiatio de futuro sit determinate vera, opus est, ut sit infallibiliter vera. Nam si non sit infallibiliter vera, non erit determinate vera, sed indifferens, ut sit etiam falsa. Infallibilitas autem veritatis enuntiationis de futuro pendet ex infallibilitate et necessitate effectus futuri in se spectati, et non e contra. Et hac ratione dixit Aristoteles in contextu^a, quod si enuntiationes de futuro essent determinate verae, res evenirent necessario, esto enuntiationes numquam proferrentur, quia tunc res non ob id forent necessario eventurae, quia enuntiationes essent determinate verae, sed ob id enuntiationes essent determinate verae, quia res forent necessario eventurae.
^aAristot. de interpret. c.9 (III.10, 18b 36)."
63. Molina *Concordia* 7. 4 et 5. 1. membr. ult.
64. See Donald Carson, *Divine Sovereignty and Human Responsibility*, New Foundation Theological Library (Atlanta: John Knox Press, 1981), pp. 24-35.
65. Molina *Concordia* 6.1.1.
66. Ibid. 4.53.3.14.
67. Ibid. 4.53.3.17.
 "...bona omnia, sive per causas naturae necessitate agentes sive per liberas fiant, ita pendent a divina praefinitione...ac providentia ut in particulari per illam a Deo intenduntur, actus autem mali arbitrii creati eatenus etiam divinae praefinitioni ac providentiae subduntur, quatenus causae unde emanant concursusque Dei generalis ad eos eliciendos necessarius per divinam praefinitionem ac providentiam conferuntur, licet non eo fine ut illi ex eis emanent, sed ut alii longe diversi fierent rebusque arbitrio praeditis sua innata libertas in earum maximum bonum servaretur, et insuper subduntur eidem divinae praefinitioni et providentiae, quatenus esse nequint in particulari, nisi Deo per suam providentiam in maius aliquod bonum eosdem in particulari permittente: consequens profecto est ut omnia universim divinae providentiae ac voluntati in particulari subdantur quaedam eorum intendenti in particulari et cetera permittenti in particulari. Quo fit ut neque folium de arbore pendens moveatur neque ex passeribus duobus qui asse veneunt unus cadat super terram necque quicquam aliud omnino fiat sine voluntate ac providentia Dei circa id in particulari vel intendente vel permittente illud in particulari...."
68. Ibid. 2.25-26. See also Romeyer, "Libre arbitre et concours," pp. 177-88; *Dictionnaire de théologie catholique*, s.v. "Molinisme," 10.2., cols. 2109-16.
69. See his devastating critique in *Concordia* 4.53.2.
70. Ibid. 4.53.3.2. "...concursum Dei generalem...non censemus esse influxum Dei in causam ut prius eo mota et applicata agat, sed cum causa immediata in effectum...."
71. Ibid. 4.53.3.7. "...hic concursus non est motus Dei in arbitrium quo illud moveat, applicet et determinet vel ad eam numero locutionem vel etiam ad loquendum, sed est influxum cum arbitrio pendens ut sit ab influxu et cooperatione ipsius arbitrii...."
72. Ibid. 4.53.3.9. Vansteenberghe comments,
 "Thus, our evil acts lie outside the end for which God has given us freedom and His general concurrence. He does not will them, neither as the author of nature nor as legislator, since He forbids them and seeks to turn us from them; He would will that they not exist if we ourselves were to so will, but He permits them in light of a greater good: the normal exercise of our free will. As for our good works, He wills them first with a conditional will, if we ourselves will them freely: thus it is that He wills the salvation of all men; but foreseeing what shall emanate from

our free will, He consents to them and wills them with an absolute will.” (*Dictionnaire de théologie catholique*, s.v. “Molinisme,” by Vansteenberghé, 10.2., col. 2112.)

73. On the way in which sins contribute to the eventual realization of God’s purposes, see the powerful statement in *Concordia* 4.53.2.15.
74. *Ibid.* 7. 1 et 2. 1.8.
75. For a good statement see *ibid.* 4.50.9.
76. *Ibid.* 7. 4 et 5. 1.11.7-16; 4.53.4.12. Whitacre notes that subsequent Molinist theories of predestination distinguished two alternative views of predestination: (i) *post praevisa merita*: God predestines those whom He knows will make good use of His grace; (ii) *ante praevisa merita*: God gratuitously elects whom He wants to save and then predestines them. But Molina’s own view bursts these categories, since he held predestination to be gratuitous and yet *post praevisa merita* since the decision of the divine will is posterior to middle knowledge. (*Hasting’s Encyclopaedia*, s.v. “Molinism,” by Whitacre.) On Molina’s view predestination did not occur prior to God’s middle knowledge of what every creature would do under any set of circumstances, yet His choice of a world with its predestined was not chosen on the basis of the fact that those individuals would be saved. Hence, it would be best to say that on Molina’s view, predestination is *post praevisa merita, sed non propter praevisa merita*.
77. *Dictionnaire de théologie catholique*, s.v. “Molinisme,” by Vansteenberghé, 10.2., cols. 1028-9.
78. See the provocative series of contrasts in Théodore Regnon, *Bannesianisme et Molinisme* (Paris: Retaux-Bray, 1890), p. 48.
79. Molina *Concordia* 3.40; 4.53.2.25, 30.
80. Vansteenberghé summarizes,

“In summary, God, before any free act of His will, foresaw with the help of His purely natural knowledge and His middle knowledge, by the comprehension of His essence, everything which was in His power, among other things: the innumerable rational creatures that He could create, as well as the innumerable orders of things, helps, and circumstances in which He could place all these creatures and those which He decided to create; in addition He saw what would happen in these diverse orders of things through the will of each rational creature on the hypothesis that He wanted to establish this or that order of things, with these or those helps on His part and these or those circumstances.

By a unique and simple act of His will, He established the entire order of things and beings which would come to pass from creation until the end of time with the helps and the gifts which he decided to grant to angels and to men, such that each was free to attain eternal life or be separated from it.

By this act of the divine will and of the choice of an order of things and helps instead of some other, the angels and men who God foresaw should die in a state of grace have been predestined; the others have not been, even though by this same act God has sufficiently provided for His part what they need to arrive at salvation and though His providence was greater towards certain of them than for many of the predestined.” (*Dictionnaire de théologie catholique*, s.v. “Molinisme,” by Vansteenberghé, 10.2., col. 2130.)

81. Molina *Concordia* 4.53.2.22. “At profecto cum verum vero consonet, a falso autem cito discrepet verum, quod tam facile ac perspicue illa quatuor ex capite praescientiae mediae cum arbitrii libertate cohaereant, signum est manifestum nos integram legitimamque rationem conciliandi ea omnia tradidisse.”

NOTES TO CHAPTER EIGHT

1. See Friedrich Stegmüller, *Zur Gnadenlehre des jungen Suarez* (Freiburg in Breisgau: Herder, 1933), p. 39-41.

2. Ibid., pp. 26-8, 42-3.
3. See R. P. Francisco Suarez, *Opera omnia*, ed. Carolo Berton (Paris: Ludovicum Vives, 1856-78), vol. 17: *Tertia pars Summa theologiae doctoris sancti Thomae Aquinatis cum commentariis et disputationibus P. Francisci Suarez e Societate Jesu (De verbo incarnato) Quaest. 1. art. 3.*
4. Suarez *Opera*, vol. 11: *Opuscula sex inedita*, 1: *De concursu et efficaci auxilio Dei ad actus libri arbitrii necessario* 1.15.2. He uses here for the first time the term *scientia media*. Suarez seems to deliberately shun the phrase, preferring to speak of God's *scientia conditionata*, and scarcely ever mentions Molina or his works by name. On his reasons for adopting a doctrine of middle knowledge, cf. idem *Opera*, vol. 7: *Tractatus de gratia Dei: Prolegomenon* 2.1.1, where he explains that the rationale for such a doctrine is its usefulness in reconciling human freedom with divine concurrence, prevent grace, and predestination. For a good discussion of Suarez's grounds for affirming middle knowledge, see Paul Dumont, *Liberté humaine et concours divin d'après Suarez* (Paris: Gabriel Beauchesne et ses fils, 1936), pp. 169-227.
5. For a review of the literature, see the bibliography published on the four hundredth centenary of Suarez's birth by Placido Mugica, *Bibliografía suareciana*, Publicationes de la catedra Francisco Suarez 3 (Granada, Spain: Universidad de Granada, 1948) or the bibliography (perhaps more accessible for English readers) by J. F. McCormick, *A Suarezian Bibliography* (Chicago: Jesuit Educational Association, 1937). The standard biography of Suarez is that of Raoul de Scorraile, *Francois Suarez*, 2 vols. (Paris: P. Lethielleux, 1912-13). For more recent literature consult such standard reference works as the *Enciclopedia Filosofica* (1957), s.v. "Suarez, Francisco," by C. Giacon; *Encyclopedia of Philosophy*, s.v. "Suarez, Francisco," by John Mourant, etc.
6. Suarez *Opera*, vol. 11: *Opuscula*, 2: *De scientia Dei futurorum contingentium* 1.2-4; cf. idem *De gratia. Prol.* 2.7.15-17.
7. Thomas U. Mullaney, "The Basis of the Suarezian Teaching on Human Freedom," *Thomist* 11 (1948): 1-17, 330-69, 448-502; 12 (1949): 48-94, 155-206; see esp. 11 (1948): 360. Cf. idem, *Suarez on Human Freedom* (Baltimore, Maryland: Carroll Press, 1950).
8. Suarez *De scientia Dei* 1.2.2. "...propositio quae non est determinate vera, non est vera, quia adhuc est quasi suspensa, et indifferens ad veritatem et falsitatem...."
9. Ibid. 1.2.10.
10. Ibid. 1.2.1.
11. Ibid. 1.2.2. Cf. idem *De gratia Prol.* 2.7.13., where he identifies three errors on Aristotle's part: (1) that future contingent propositions lack determinate truth, (2) that future contingents do not have such truth as to be known certainly and infallibly, and (3) that God does not foreknow future contingents with certainty.
12. It is not altogether clear how Suarez would reconcile God's immutability with the constant change in truth value of tensed propositions. Since future contingent propositions become false once the events occur, God's knowledge, while not increasing, would seem to be constantly changing. On the one hand, given his view of eternity and time, Suarez wants to affirm that God has literal *foreknowledge*: "Further, even in all propriety, it is most certain that God's knowledge, like God Himself, in its duration precedes the existence of all created things. Therefore, if this prefix 'fore-' simply denotes this precedence, then it will be most certain that with all propriety there is foreknowledge in God" (Suarez *De scientia Dei* 1.7.18. "Deinde, in omni etiam proprietate, certissimum est scientiam Dei, sicut et Deum ipsum, duratione antecedere rerum omnium creatorum existentiam: ergo, si illa particula, *prae*, solum denotet hanc antecessionem, certissimum erit esse in Deo praescientiam cum omni proprietate.") On the other hand, he states that in God's mind things are not cognized as future, but as present at their times and that God knows them as present in His eternity (idem *De gratia. Prol.* 2.9.25.). This would suggest that God literally foreknows future events under the form of tenseless, temporally indexed propositions and that the futurity of the events is known via some non-propositional sort of knowledge. God's propositional knowledge is thus

immutable, but it must be conceded that His non-propositional knowledge changes with time.

13. Suarez *De scientia Dei* 1.2.6. "...haec futura contingentia, quae a nobis per propositiones de futuro significantur, antequam in tempore fiant atque ab aeterno habent determinatam veritatem, secundum quam cognoscibilia sunt, et a Deo praesciuntur."
14. Ibid. 1.2.7-8.
15. Suarez *De gratia. Prol.* 2.7.7. "...esse rem futuram formaliter consistere in transitu quodam ab esse, quod habet in causa, ad esse, quod in seipsa aliquando habitura est."
16. Ibid. 2.7.8. "solum est fundamentum futuri esse."
17. Ibid. 2.7.18. Cf. the fascinating discussion of God's eternity and future contingents in idem *De scientia Dei* 1.7. According to Suarez, divine eternity is a necessary, infinite, and immutable duration. Because God is changeless, His eternity lacks internal succession and is, hence, indivisible. God coexists with every temporal moment, but He exceeds each moment. Created things, having finite duration, cannot coexist with God from or even in eternity. Nevertheless, neither do they coexist with only a part of it, since it is indivisible. Hence, things which do not exist or have not existed do not coexist with eternity, but when they come to exist in time they will come to exist in eternity. Things thus come to exist successively for God, but since He receives no new relations, there is no intrinsic succession in God's eternity. Things are present to God from eternity only in being present to the divine knowledge.
18. Suarez *De gratia. Prol.* 2.7.7. "Nam si est illi conformis, est vera; sin minus, est falsa, quaecumque fuerit esse, quod habeat in causa."
19. Suarez *De scientia Dei* 1.2.9.
20. Suarez *De gratia. Prol.* 2.7.9.
21. Suarez *De scientia Dei* 1.2.9. "...etiamsi nullo modo sit nunc praesens secundum existentiam realem, satis est quod necessario altera pars determinata postea habebit illam praesentiam realem, quia propositio non enunciat rem praesentem, sed futuram, et ideo cum illa ut sic debet habere conformitatem." Suarez also points out that according to many theologians future events are present to eternity in their real existence.
22. Ibid. 1.8.1; see 1.3-7 for his refutation of alternative views.
23. Ibid. 1.8.2. "...Deum cognoscere haec futura, solum per simplicem intuitum veritatis vel rei quae futura est, in sua temporis differentia, et prout in illa futura est, et secundum omnes condiciones existentiae quas in illa est habitura."
24. Ibid. 1.8.8. See also Hans Seigfried, *Wahrheit und Metaphysik bei Suarez*, *Abhandlungen zur Philosophie, Psychologie, und Pädagogik* 32 (Bonn: H. Bouvier, 1967), pp. 70-71; cf. Max Rast, "Die Possibilenlehre des Franz Suarez," *Scholastik* 10 (1935):350, 360, 365-6; Josef Leiwesmeir, *Die Gotteslehre bei Franz Suarez*, *Geschichtliche Forschungen zur Philosophie der Neuzeit* 6 (Paderborn: Verlag Ferdinand Schöningh, 1938), pp. 89-92; Léon Mahieu, *Francois Suarez: sa philosophie et les rapports qu'elle a avec sa théologie* (Paris: Desclée de Brouwer, 1921), p. 230.
25. Suarez *De scientia Dei* 1.8.10. "Ex parte autem rerum, ut absolute sciri ab aeterno possint, necesse est ut aeternitati aliquando coexistant, quamvis illa coexistentia aeterna not sit....Tamen, ut ex parte objecti terminare possint scientiam aeternam, necesse est ut aliquando saltem sit."
26. Ibid. 1.9.2.
27. Ibid. 1.9.5-7.
28. Cf. discussion in Suarez *De gratia. Prol.* 2.10.
29. Suarez *De scientia Dei* 1.9.8-20.
30. See William Lane Craig, "St. Anselm on Divine Foreknowledge and Future Contingency" *Laval théologique et philosophique* 42 (1986): 93-104.
31. Suarez *De scientia Dei* 1.9.16.
 "Concedo igitur ex illo antecedente sequi aliquam necessitatem in consequenti,

non tamen necessitatem simpliciter seu absolutam, sed tantum secundum quid, quae non repugnat contingentiae. Quae optime dicitur esse necessitas illius compositionis, quae non repugnat contingentiae seu libertati actus seu effectus, quia revera haec non dicitur necessitas compositionis propter solam suppositionem scientiae divinae, sed potius quia ipsa scientia divina supponit futuritionem, seu veritate veritatem rei futurae.... Unde, quando communiter dicitur, supposito quod Deus novit rem esse futuram, non posse non esse futuram in sensu compositionis, ideo id verum est sine repugnantia libertatis seu contingentiae, quia, in illa suppositione scientiae, virtute seu mediate includitur suppositio objecti ejus, scilicet, veritatis futurae. Non est ergo illa suppositio mere extrinseca, neque est omnino independens a libera potestate causae proximae, sed potius illius futuram determinationem supponit, ita ut, si futura non esset, a Deo non fuisset scita.”

32. Ibid. 1.9.18.

33. Ibid. 1.9.19-20. The best way of putting this, says Suarez, is: “posse ... hominem non peccare, etiamsi Deus praescierit illum peccaturum; non tamen id esse facturum; nam si esset id facturum, Deus praescivisset illud, et non aliud.”

34. Ibid. 1.9.22.

“Dicendum vero est, ad certitudinem scientiae, ex parte objecti materialis, seu rei cognoscendae, solum requiri veritatem determinatam, et necessitatem compositionis, quae illam necessario comitatur; nam propositio, quae semel est vera, pro eo tempore, quo vera esse supponitur, necessario vera est, necessitate scilicet compositionis; quia non potest simul vera et falsa esse. Neque hanc veritatem aliud desiderari potest ex parte istius objecti; quia, si talis veritas, prout in se est, attingatur evidenti et claro lumine, fieri non potest ut iudicium sit falsum, quod est esse infallibile et certum. Ex parte igitur cognoscentis requiritur ad certitudinem et infallibilitatem tale lumen, tantaque vis cognoscendi, ut semper veritatem attingat, nec possit ab hoc scopo discrepare ex instrinseca proprietate sua; hujusmodi autem lumen est in Deo, et inde oritur in ejus scientia, ut scientia cujuscumque rei est, necessitas illa quoad specificationem quam in solutione primi argumenti declaravimus.”

35. On the proof from Scripture, see *ibid.* 2.1; *idem De gratia. Prol.* 2.2.; on the proof from tradition see *idem De scientia Dei* 2.2-3; *idem De gratia. Prol.* 2.2-5. On the suitability of the term *scientia media* see *idem De scientia Dei* 2.3.4.

36. Suarez *De scientia Dei* 2.4; *idem De gratia. Prol.* 2.1.1; cf. 2.5.15-16.

37. Suarez *De scientia Dei* 2.5; *idem De gratia. Prol.* 2.8.1.

38. Suarez *De scientia Dei* 2.5.5-6.

39. Ibid. 2.5.12.

40. Suarez *De gratia. Prol.* 2.7.25.

“Respondeo actualement existentiam, aliquando futuram, esse fundamentum veritatis absolutae assertionis de futuro, eodemque modo servata proportionem existentiam actualement, quae ex hypothesi esset futura, esse fundamentum veritatis conditionatae assertionis, et ideo utraque veritatem posse cognosci ad modum praesentis, quia Deus non accipit scientiam a rebus, ut ab actuali existentia objecti pendeat.”

41. Suarez *De scientia Dei* 2.5.13. “...sed alteram determinate habere in se, et aliquando esse veras, aliquando falsas, juxta conformitatem vel difformitatem ad id quod significant.”

42. Suarez *De gratia. Prol.* 2.7.21.

“...sed eodem modo causa ex hypothesi proposita et apprehensa ac si futura esset, consequenter transitura esset in actum secundum, qui in re non possit esse, nisi certus et determinatus; ergo propositio de futuro dicens habitudinem ad talem effectum, in re erit vera, et ad eandem infinitatem et immutabilitatem intuitus divini pertinet, ut illam attingat.”

43. Suarez *De scientia Dei* 2.6.2-3.

44. Ibid. 2.6.3. “...Deo autem per se notum esse, suo infinito lumine, quo intuens

omnes rerum complexiones et compositiones possibles, simul intuetur quae sint vel essent futurae, et quae non.”

45. Ibid. 2.8.11.
46. See Suarez, *Opera*, vol. 10: *Appendix prior: Tractatus de vera intelligentia auxilii efficacis, ejusque concordia cum libertate voluntarii consensus* 1, 12, 13, 14; idem *De concursu et auxilio Dei* 3.6, 14, 17, 20. See also discussion in *Dictionnaire de théologie catholique*, ed. A. Vacant, E. Mangenot, E. Amann (Paris: Librairie Letouzey et aⁿe, 1923), s.v. “Congruisme,” by H. Quillet, vol. 3.1, cols. 1120-38; *Dictionnaire de théologie catholique*, ed. A. Vacant, E. Mangenot, E. Amann (Paris: Librairie Letouzey et aⁿe 1941), s.v. “Suarez, Francois,” by R. Brouillard, vol. 14, cols. 2687-90; *Hastings’ Encyclopaedia of Religion and Ethics*, s.v. “Molinism,” by Ælfred Whitacre; Mahieu, *Francois Suarez*, pp. 233-46; Mullaney, “Suarezian Teaching on Human Freedom,” pp. 448-502.
47. Suarez *De concursu et auxilio Dei* 3.14.9.
 “Efficaciam hujus vocationis in hoc consistere quod Deus, infinita sua sapientia, praevidens quid unaquaeque causa seu voluntas in omni eventu et occasione operatura sit, si in ea constituatur, etiam cognoscit quando et cui vocationi sit unaquaeque voluntas assensum praebitura si ei detur. Unde, quando vult hominem convertere vult etiam illum vocare illo tempore, et modo quo novit illum consensurum, et talis vocatio appellatur efficax, quia, licet ex se non habeat infallibilem effectum, tamen, ut subest tali scientiae divinae infallibiliter est illam habitura.”
48. Ibid. 3.15-17.
49. Th. de Regnon, *Bañes et Molina* (Paris: H. Oudin, 1883), p. 126.
50. Suarez *De scientia Dei* 2.6.9; idem *De concursu et auxilio Dei* 3.14.16.
51. Regnon, *Bañes et Molina*, pp. 157-8. I have revised it slightly.
52. Suarez *De scientia Dei* 2.6.7.
 “Quod totum constat ex illa ratione generali supra facta, quod intentio efficax finis supponit praescientiam mediorum, ut possibilitium et efficacium respectu intendentis. Hinc vero non fit electionem aut praedestinationem esse propter merita, si allud *propter* dicat causam moventem; sed solum sequitur merita esse necessaria media ad executionem illius intentionis, sine quorum praecognitione; ...nemo posset prudenter intendere.”
53. Ibid. 2.7.
54. Ibid. 2.7.3-7.
55. Ibid. 2.7.8-14; Suarez *De gratia. Prol.* 2.8.
56. Suarez *De scientia Dei* 2.8.
57. Ibid. 2.7.6.
58. Ibid. 2.8.5-8.
59. Ibid. 2.8.5. “...nullam sufficientem rationem differentiae reddi posse inter divinam et creatam voluntatem, ut in altera haec futura possint cognosci, et non in alia.”
60. Ibid. 2.7.15. “Dicendum ergo est Deum cognoscere haec futura conditionata sua infinita virtute intelligendi, penetrando immediate veritatem quae in ipsis est, seu concipi potest, neque indigere aliquo alio medio ut illa cognoscat.”
61. Ibid. “Ex parte autem objecti, seu rei cognoscendae, neque oportet ut aliquod medium intercedat, quia veritas ipsa in se et sine alio medio videtur a Deo....”
62. Ibid. 2.7.16.
 “Unde obiter constat (quod multum hanc sententiam confirmat) fere non esse majorem difficultatem in hac scientia conditionatorum, quam absolutorum contingentium, quia in utrisque cognoscitur veritas rei, licet in causis suis videatur esse indeterminata, et a parte rei nondum existat; cognoscitur autem per conformitatem et comparisonem ad *rem*, prout in tali tempore et modo existet, vel absolute, vel sub conditione; ergo scientia divina ad omnes has veritates extenditur ex vi suae infinitae comprehensionis. Nec refert quod res absolute futura aliquando habitura sit realem existentiam, non vero res sub conditione tantum proposita, quia illa realis existentia vere non est, antequam in propria duratione

et mensura res producat, sed solum per ordinem ad illam propositio de futuro habet veritatem, et divinus intuitus aeternus ratione suae immensitatis ad illam terminatur, ac si jam vere existeret. Sic ergo in praesenti, licet res actu non existat nec absolute extitura sit, propositio conditionata habet veritatem per habitudinem et conformitatem ad illam sub existentia apprehensam cum praedicta conditione; et divinus intuitus, ratione suae infinitatis, extendi poterit ad videndum quid tali rei conjungeretur, aut quid ab illa prodiret, si tali mode constitueretur. Est ergo in his futuris omnibus idem cognitionis modus.”

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